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Month In View

It's still 1998, hopefully the year of the Amiga resurrection. **Nick Veitch** is still cheerful…

Here at *AF* towers we are always on at you to get more out of your machine. We have always tried to bring you the skills and knowledge to help you get the most from your Amiga, and I'm pleased to say that this is a tradition we are more than happy to continue. Surely you can't get more out of your computer than to earn a living using it, and that's precisely what we are helping you to do this issue. We have gone to great lengths to bring you a feature packed with facts and information on how to set up your own business based around the Amiga. You will still have to provide some of the effort though!

All work and no play is, er, dull – so why not take a look at some of the games reviewed this issue, like the very interesting *The Shadow of the Third Moon*, or the long-awaited and strangely titled *OnEscapee*.

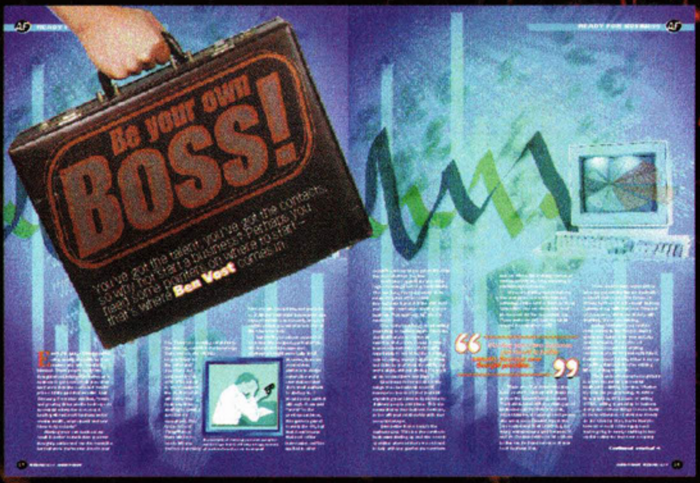
Unfortunately, *Myst* has not quite turned up yet and there is still no definite news about whether *Quake* will be made for the Amiga, but there's plenty of other exciting games stuff – check out the news on page 8 and Andy Smith's previews on page 28.

Thanks to your input about our creative section we have a special one-off tutorial this month on creating AmigaGuides. If you want to know how to do something in particular, why not drop us a line – we will be only too happy to help you out.

But possibly my favourite thing of the issue is Power Computing's new tower case. It looks fantastic, it's got loads of room and it's easy to put together – just what millions of A1200 owners have been waiting for. But don't take my word for it, read the excellent review on page 58 written by, er, me.



Nick Veitch
Editor



BE YOUR OWN BOSS PAGE 14
The business of the Amiga is business. Or something. Join Ben as he uncovers how your hobby could earn you a living.



THE SHADOW OF THE THIRD MOON PAGE 32
It seems like we've been waiting for this game for a bit more than just three moons, but it's here now. What will Andy make of it?



POWER TOWER PAGE 58
Is this the most towerful power ever? Power Computing's latest release has the ease of Lego™ and the styling of something stylish…



OXYPATCHER PAGE 62
The trouble with old software is it was never written with faster processors in mind. OXYPatcher can speed up some of this software dramatically on an '040.

AMIGA FORMAT Contents

ISSUE 107 FEBRUARY 1998

AF NEWS

AF Competition!



WIN EVERY EPIC GAME EVER!

That's right – our fantastic competition offers you the chance to win every single Epic game released between now and, well, forever! What are you waiting for? Turn to page 80 now!

AF REGULARS

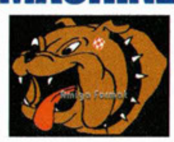
AF SERIOUSLY AMIGA



Sleek, smooth and smart – the Power Tower certainly looks the part, but should this book be judged by its cover?



The *Cinema 4D* render test (left) shows how effective *OXYpatcher* really is.





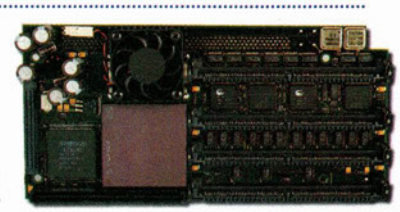
New effects abound in each program, but is it worth upgrading?



Will this equipment make your Amiga the perfect machine for complicated networked games?



The Zip Plus is sleek and smooth, both in looks and in action.



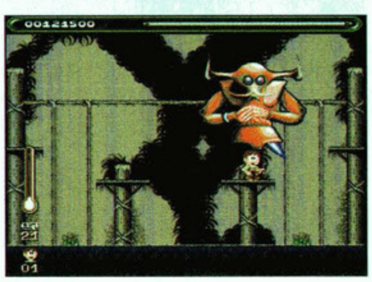
The PPC board is ace, but will it get the software support it deserves?

AF CREATIVE





Find out which ace games you've missed with our Games Check on page 35 (above, below).





A big bad bloke in *Sword* (left) and top flying action in *The Shadow of the Third Moon* (top left).

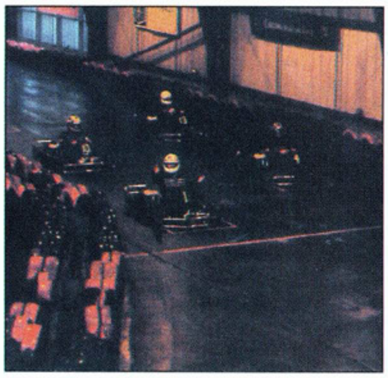


The VIC-20, Plus 4, C16, Vision-8, BK0010 and ColecoVision emulators (right) explained.

AMIGA FORMAT News

WHAT'S UP?

Need for SPEED!



Sunday December 14th, 1997, is a day that will go down in history. Some of the UK's best-known developers all gathered together at a secret location in Milton Keynes for what was to become the first of many DevKarts. At the Cologne show it was generally decided that the developer conference was really just a press conference and that, if an event was going to be organised which had little to do with development on the Amiga, then it might as well be fun.

Steve Jones of HiQ Ltd and David Link from HiSoft took it upon themselves to organise the event, gathering commitments from people as far afield as Thomas Svenson from Swedish Amiga mag *Amiga Info* and Greg Perry from Australia's GPSoftware, together with the cream of British Amiga developers such as Mick Tinker from Index, Graham Heggie from Hydra and Dave Law from Weird Science. To make the day more official, David Link from HiSoft even got T-shirts printed, but more on that later.

> *The biggest difference was seen in the different weights of the drivers (obviously Nick and Ben didn't do so well)...*

All in all, sixteen drivers raced go-karts around a short but vicious track with little space to pass other competitors. With telephonic encouragement from Darreck Lisle from Amiga Inc. (who wanted to come but whose wife was about to give birth any day) and the prospect of winning a dodgy trophy, the contenders lined up on the raceway. In lots of four or five at a time, we raced around the circuit.

The karts, which were variable in quality at best, were no respecters of driving skill or lack thereof.

Even though some of the racers had driven karts before (one as recently as the day before, eh Rich?), it didn't help at all. The biggest difference was seen in the different weights of the drivers (obviously Nick and Ben didn't do so well) and the women drivers were well suited to throwing themselves around the track at top speed.

As is always the case at these events, there was plenty of red-faced argument about interesting tactics that even Michael Schumacher would be

POS.	CAR NO	TEAM
1	06	Tom Ianiri – Power Computing
2	14	Graham Heggie – Hydra Systems
3	07	David Law – Weird Science
4	03	Heather Jones – HiQ Ltd.
5	15	Ben Vost – Amiga Format
6	04	Stephen Jones – HiQ Ltd.
7	01	Greg Perry – GPSoftware
8	12	Gill Jones – Index Ltd.
9	16	Nick Veitch – Amiga Format
10	09	David Link – HiSoft
11	02	Shaun Cosgrove – Wizard Development
12	10	Richard Kiernan – HiSoft
13	11	Mick Tinker – Index Ltd.
14	05	Jeff Walker – HiSoft
15	13	Thomas Svenson – Amiga Info

The final rankings show a poor performance from the *AF* team. But everyone else cheated, and our karts weren't as good, honest...



The DevKart champions for 1997. But it should have been us! Just wait until next year...

Amigas in India

Petro Tyschtschenko has been very happy to announce that India is a new arena of conquest for the Amiga. Well-known Indian distributor Shaf Information and Technologies PVT. Ltd. have signed an order for 2000 A1200s for the beginning of February 1998.

Shaf are authorised dealers for Scala, CIS in France, Deskstation Technology in the US, Digital Processing Systems, makers of the PAR card in the UK and Newtek.

The A1200 is going over to Mumbai in India to be the basis for a low-cost video titling solution for the burgeoning video market there. Pradeep S. Kohli, Shaf's director of finance had this to say: "This first big order will be the beginning of a long relationship between Amiga International, Inc. and Shaf. I am quite sure that other orders will follow to ramp up the Indian broadcast market. Amiga is one of the best and most efficient solutions."

Shaf

RC5 powers up

Although the RC5-56 challenge has been completed, the RC5-64 challenge is picking up steam with some Amigas being able to work out 700,000 keys a second thanks to phase 5's CyberStorm PPC card and the new PowerPC version of the Amiga RC5 client. Because of the nature of the CyberStorm PPC, where you might have been able to get about 118kkeys/sec from your 060, you can now get about 550kkeys from your 604e. Best of all, you can run both the 68k client and the 604e client at the same time to get the maximum of roughly 700kkeys/sec.

The take up for the 64-bit challenge doesn't seem to have been as quick as for the 56-bit contest, perhaps because of the fact that once the 56-bit version was completed people thought that was the end. Nothing could be further from the truth and DES, the people behind the RCA encryption, are also creating a sideline competition, details of which are unknown at this time but which should be available by the time you read this.

The Amiga team is currently ranked in seventh place and we've searched 1,844,344 blocks at a rate of 104,185.04 kkeys/sec. This seems pretty good until you think that we still potentially have 68,719,476,736 blocks to go (phew!). If you're on the net and you have an Amiga, then why not visit http://homepage.cistron.nl/~ttavoly/rc5/ for more details?



Ready to race, although Ben and Nick were probably already in the bar...

ashamed of, and Thomas Svenson was dismayed at being disqualified during the essential semi-final playoffs, particularly as others who had committed the same offence, namely driving up the backside of another person's kart, had got away scot-free.

The end result was a bit of a surprise. It was generally felt that while Tom's driving was consistently good (apart, obviously, from the time when he went right up the tail end of Ben's car and explained it by saying his kart had no brakes!) he was very tedious and shouldn't have come first.

Most participants were go-karting novices, and found it amazing that although the event took place over about two and a half hours, it felt like a whole-day thing. After some liquid refreshment in the bar, however, we were all raring to go again. The race must go on.



Yet more attractive models with the exclusive DevKart t-shirt.

AF Competition!

Win a limited edition DevKart t-shirt!

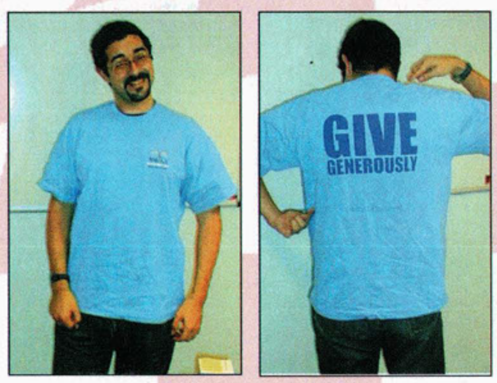
This exclusive t-shirt, designed by top fashion guru Jeff Walker and modelled here by the lithe and lovely Ben Vost, was limited to a run of only fifty. We managed to persuade David Link of HiSoft to let us have three of the remaining number for our loyal readers. They come in a "One size fits none"-style of XL, and if you want to grab a bit of Amiga (and racing) history, all you have to do is answer the following simple question:

Why did Thomas Svenson come last?

Send your answer on a postcard with your address on it to the following address:

***AF* Devkart Compo, 30 Monmouth Street, Bath, BA1 2BW.**

No employees of Future Publishing or any of the companies named in connection with this story may enter. Nick's decision is final and no correspondence will be entered into. You have until February 28th. Oh yeah, and Murray Walker can't enter either.



Kate Moss will be quaking in her designer boots when she sees the gorgeous models we have here at *AF*.



Continued overleaf ➡

Games news for '98



Just two of the impressively long list of game releases planned for the Amiga in 1998, both in the *Command and Conquer*-style.

It seems like the games side of the Amiga industry is busy giving us news once again. UK publishers like Vulcan, Sadeness and Alive Media Soft are announcing that they've signed up new players in the games world to bring a whole range of games, some familiar in style, others like nothing we've so far seen, to the Amiga market during 1998.

Two factors have started this avalanche of Amiga development. The first is the prevalence of graphics cards for the Amiga and the stability of the software for them, namely *Picasso96*, *CyberGraphX* and *RTG Master*.

Some estimates put the total number of graphics cards in use on the Amiga somewhere around the 50,000 mark, enough for developers to take them seriously. The second factor has been the long-awaited arrival of phase 5's CyberStormPPC.

While the Cybervision3D might not be that interesting a card, the CStorm



gives you one of the fastest computers around, and all for less than the price of an '040 accelerator when they first came out. All that remains is for phase 5 to bring out their 1200 version and the PowerPC side of the Amiga will really start to rock. The idea that you'll need a CD-ROM drive to get the best new games is rapidly turning into "You'll need to get a CD-ROM drive and...".

Some of the new titles coming our way in 1998 will require a graphics card and/or a PPC board and will either not work on a standard Amiga with AGA, or will be severely cut down so that they can still work.

"Well, like what?", I hear you ask. OK. Well, how about *Forgotten Forever*, recently signed up by Sadeness Software. Or *Maim & Mangle*, a game of a similar nature, both *Command & Conquer* clones with their own tweaks, signed up by Vulcan. What about *H-Bomb*, from Aurora Works, for which we start a work in progress this month on page 39.

This is just a small sample of the large number of games coming to an Amiga near you soon. If you want to keep up to date with games development on the web, we can recommend **Amiga Flame** http://www.amigaflame.co.uk and **Amiga Nutta** http://www.nutts.demon.co.uk/.

> Some estimates put the total number of graphics cards in use on the Amiga somewhere around the 50,000 mark...

More Power!

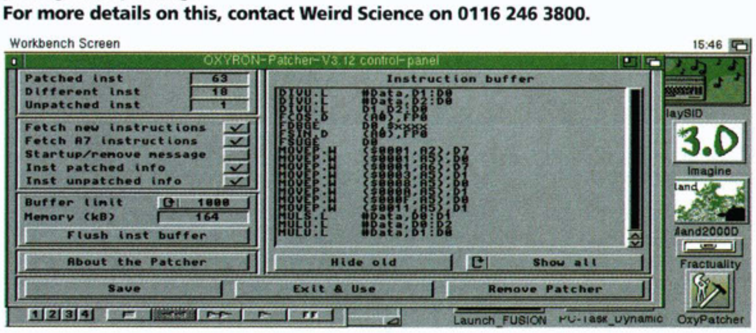
Power Computing hadn't set a price for the Amiga keyboard by the time Nick had done the review of their tower, but they have now. For an additional £30, instead of a horrible Windows95 keyboard, you can have a lovely Amiga 3000 keyboard with proper Amiga keys and everything! What's more, you also get an adaptor to allow you to plug it into your machine too.

Oh yes, and Power have another thing up their sleeves, nothing to do with the tower this time. Power Computing sell a lot of Epson peripherals including scanners and printers. They've now done a deal with Irseesoft, the chaps behind *TurboPrint*, to offer a cut-down version of *TurboPrint* that only works with Epson printers, for just £29.95 instead of the usual £49.95. This gives you all the configurability and glorious printouts you'd expect from *TurboPrint*, but only for the Epson range of printers. For more details on either of these, contact Power Computing on 01234 851500.

OXYPatcher snapped up

For those interested in getting hold of *OXYPatcher*, but unhappy about having to deal with money orders and getting them to Germany, Weird Science have been announced as the UK distributors for this *Amiga Format* Gold-winning piece of software. Better yet, their price is even lower than we expected at just £14.99 plus postage and packing.

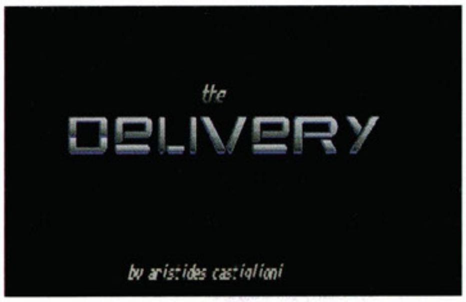
For more details on this, contact Weird Science on 0116 246 3800.



Animated Action wins award

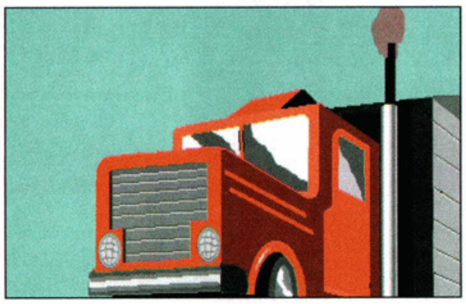
Dale Hemenway and Marco Vigelius have decided that the winner for their animation contest should be Aristides Castiglioni from Mexico for his AnimatED animation *The Delivery*.

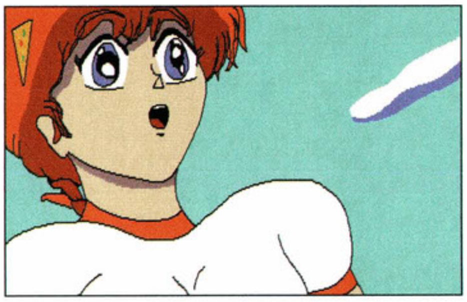
This is the story of a young anime-style girl on a desperate mission. You can find the animation on this month's CD in the AFCD23:-In_the_Mag-/News/ drawer. Enjoy, and well done Aristides!













AF Competition! Winners in full!

WHIPPET WINNERS

We had ten Motorola 28.8 modems and one Whippet, Net & Web 2 and a Motorola 28.8 modem to give to the people who got the fact that the whippet has four legs. Those of you who suggested that you knew of one with three were discounted, as were those who counted the number of pins in the PCMCIA port, or on the serial port of the Whippet – you sad, sad people!

So, the runners-up, who all win Motorola 28.8 modems are:

D.Walker, Liverpool.
Mr. A. Hall, Stoke on Trent.
Alan Currio, Falkirk.
Graeme Milne, Northumberland.
Paul Farrimond, Gtr Manchester.
A. Robinson, Lowestoft.
James Rogers, Rhyl.
Jorma Tolamo, Helsinki, Finland.
Christopher Hoey, Solihull.

And the winner, who gets the Whippet, Net & Web 2 and the modem, is:
Paul Greatorex from Bridlington.

WORKBENCH 3.1

In case you don't recall, our question for the competition to win one of three copies of Workbench 3.1 for your machine, kindly provided by Power Computing, was: "How many versions of Workbench (not Kickstart) have been released so far and can you name them?"

This seemed like a good idea, but when we were more sober we thought about it a bit further and realised it's an impossible question to answer! When the time came to decide on a winner, we had to be brutal.

Out went all the cards that didn't bother to put what machine they had, all the cards that, in a way correctly, stated that there had been three versions of Workbench – 1, 2 and 3 (we did say versions and not revisions), all the cards which had made up Workbench revisions like Workbench 2.5 or 3.03 until we were left with a (still huge) pile of cards that basically fitted the right criteria for a correct answer.

We decided on a list of Workbench revisions that we knew from when Nick and Ben first had Amigas and we came up with: Workbench 1.1, Workbench 1.2, Workbench 1.3, Workbench 1.3.2, Workbench 1.3.3, Workbench 1.3.4, Workbench 2.0, Workbench 2.04, Workbench 2.05, Workbench 2.1, Workbench 3.0 and Workbench 3.1.

That's twelve versions, count 'em. That's the answer we were going to accept.

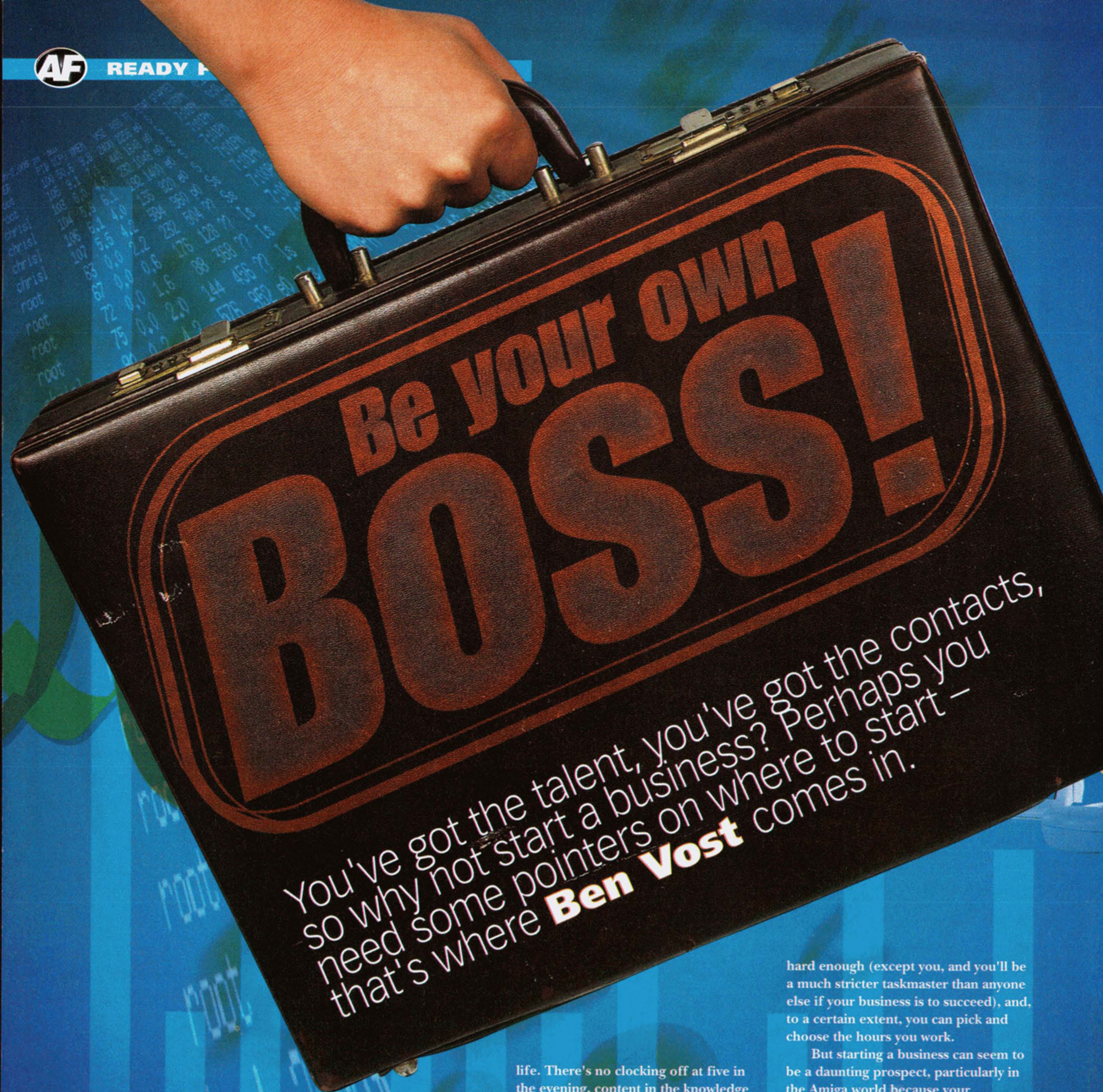
Unfortunately, not everyone is as wise as us, so we ended up with nobody getting exactly the same results as we did. In the end we decided to choose the following three people to get the Workbench upgrade:

Mr. J. G. Howard, Hebden Bridge;
Joris Weidener, Schoten in Belgium (the only one who got 1.3.4);
Rodney Chinn, Christchurch in New Zealand.

Congratulations to all three of you. It was a very hard-fought contest!



The lucky winner of an A1200 from our competition in *AF100*. Mr Price from the Isle of Wight receives his prize (held by his son) from Nick.



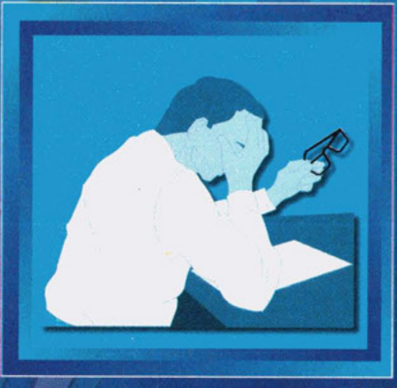
Be your own BOSS!

You've got the talent, you've got the contacts, so why not start a business? Perhaps you need some pointers on where to start – that's where Ben Vost comes in.

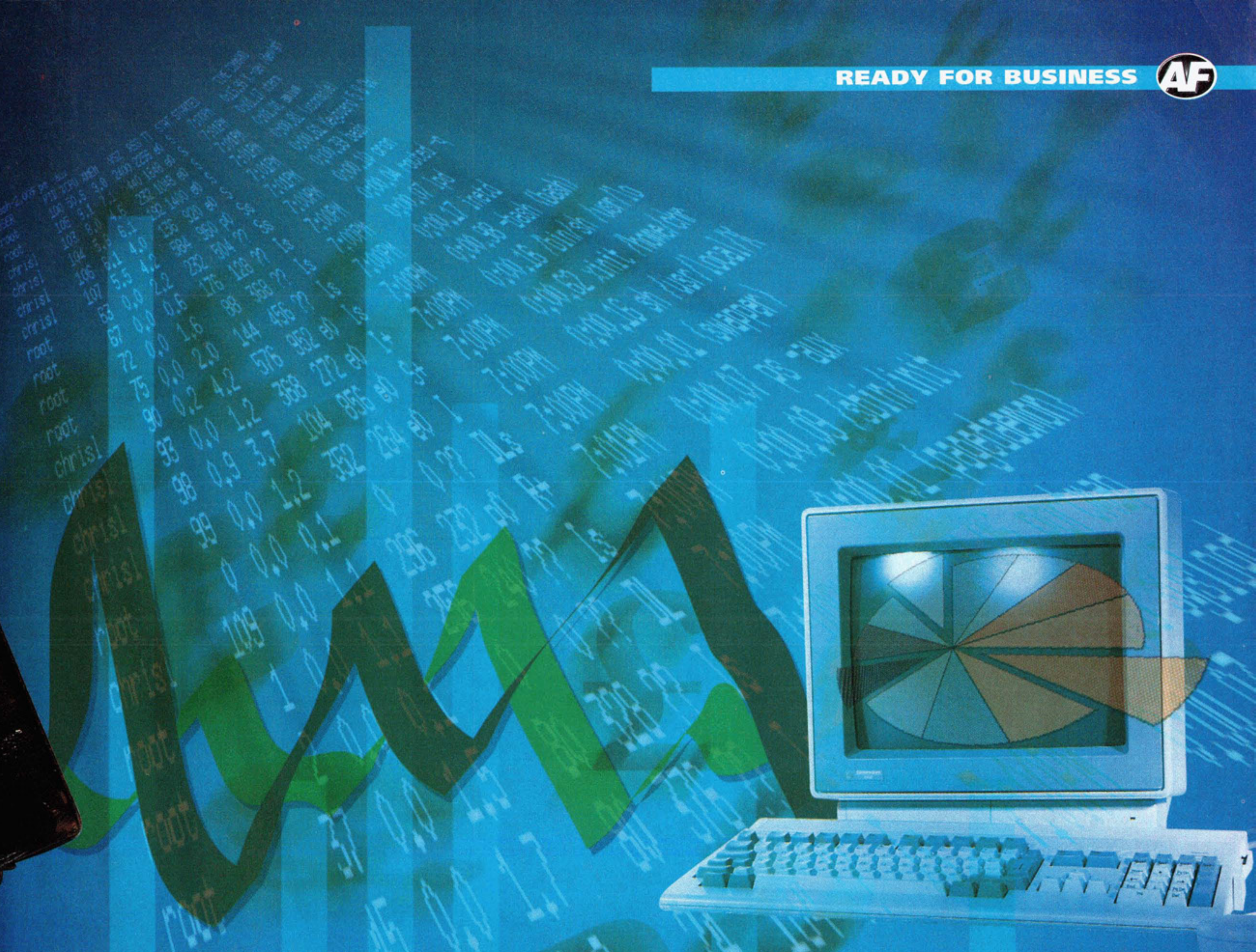
Every day *Amiga Format* receives calls, emails and material from readers who are incredibly talented. These people must have thought about setting themselves up in business to get more profit from their hard work than the occasional reader prize of fifty quid that we offer. Last February, Tony Blair said that, "small and growing firms are the bedrock of a successful enterprise economy. A healthy, vibrant small business sector creates wealth, employment and new ideas and products."

Starting your own business can result in better rewards than you ever thought possible and can also mean the hardest work you've ever done in your life. There's no clocking off at five in the evening, content in the knowledge that someone else can take responsibility for the office until you return the next morning at 9:00. It'll be down to you to make all the decisions that will affect your business, from staffing to making sure there's enough tea. This is also a Good Thing™ since there will be no-one to tell you you're not working hard enough (except you, and you'll be a much stricter taskmaster than anyone else if your business is to succeed), and, to a certain extent, you can pick and choose the hours you work.

But starting a business can seem to be a daunting prospect, particularly in the Amiga world because your marketplace might seem quite small. However, there are some niches available to Amiga owners the world over that are ideal for a small business to start up in. I should point out that although I have said "world" in the previous sentence, this guide is geared towards the UK, but that doesn't mean that a lot of the information can't be applied in other



The rewards of running your own company can be huge, but it will take a huge amount of work before they can be reaped!



countries, as long as you get all the facts you need wherever you live.

Don't take my word for any of the legal or paralegal terms or bank details. The one thing I've really learnt when researching this article is that thoroughness is probably the first word you'd better learn when starting a new business. That applies to all you UK readers too.

One of the best things about setting yourself up in business these days is the fact that there is so much help available. Not only are banks a great source of information, they'll quite happily talk to you about the ins and outs of setting yourself up in business and listen to your ideas for setting the world alight, without forcing you to set up an account there and then.

Most banks today will also try to assign you one business account manager so you don't find yourself explaining your ideas and problems to different people every time. This also means that as your business develops, so too will your relationship with your account manager.

Even better than a bank is the Business Link. This is a free service to businesses starting up and also ones in operation where advisors are on hand to help with any queries you may have and can even offer training courses on various techniques, from marketing to management and more.

If you are starting a new business, you would be a fool not to take full advantage of the service that a Business Link offers. You can check your local phone book for the one nearest you. There were over 237 Business Links around the country in 1997.

> *"Starting your own business can result in better rewards than you ever thought possible..."*

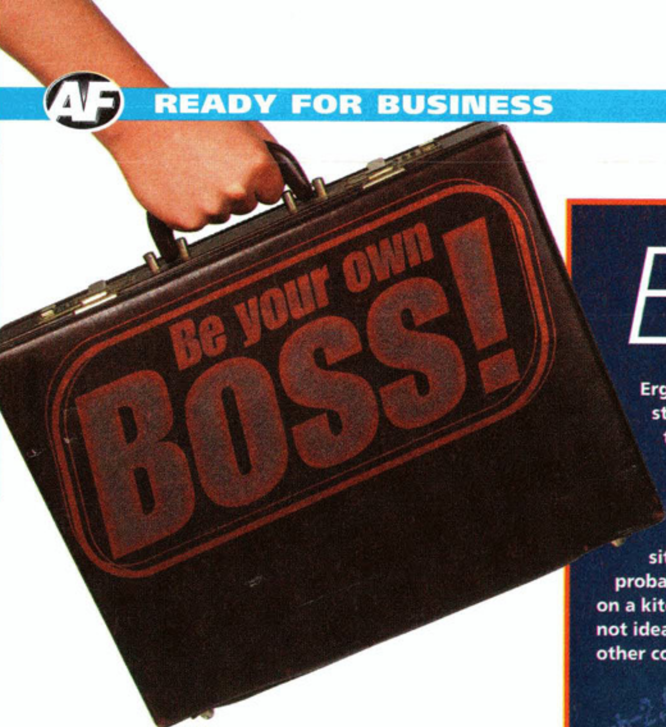
There are other advisory bodies, some of which can help with grants too, such as the Prince's Youth Business Trust which helps with the setting up of businesses run by 18-30 year olds, Instant Muscle, for unemployed people who are at some disadvantage in the jobs market and Shell LiveWIRE, for young entrepreneurs aged between 16 and 30. Contact details for all of these bodies can be found below or at your local Business Link.

There are also help organisations once you get started like the Federation of Small Businesses, The Forum of Private Business and the Small Business Bureau, along with your local Chamber of Commerce, which can all help with facilities, advice and training.

Selling hardware is not really a niche market in the Amiga industry unless you design it for yourself, like Jens Schönfeld, the creator of Catweasel, because the existing companies are all very well-established. Software is more viable, either in terms of getting distribution of an existing title or writing your own.

The area in which you're most likely to be able to set up a successful business is offering a service. Whether it's bespoke programming, an advice line, graphics, DTP, music or writing HTML, setting yourself up in business doing one of these things is more likely to be an extension of what you already do for a hobby. If so, you're likely to have all or most of the equipment you're going to need, resulting in less capital outlay for your new company.

Continued overleaf ➡



Ergo-**what?**

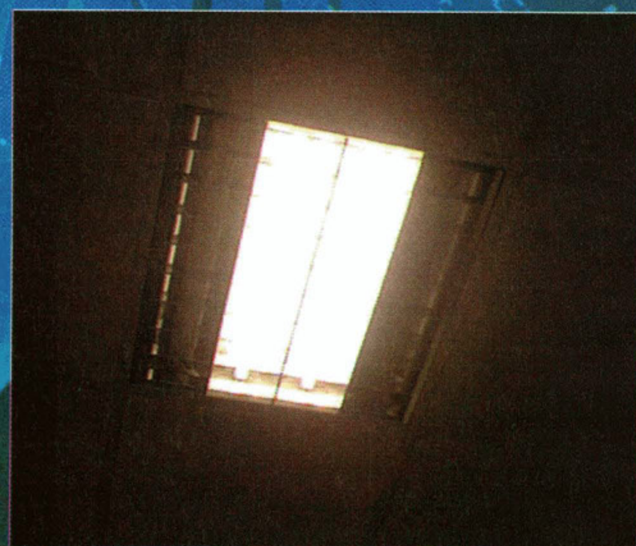
Ergonomics, so my dictionary informs me, is the study of the relationship between workers and their environment, especially the equipment they use. I'm pretty sure that if you intend to set yourself up in business using your Amiga then you're going to be sitting at a screen for most of the day, and probably well into the night to boot. While sitting on a kitchen chair is fine for a quick game of *Sensi*, it's not ideal for working on day-in and day-out. There are other considerations too:



1. Lighting. Try to make sure that the lighting in the office is not direct, say a single lightbulb. This is probably the worst kind of light you can use because it'll cause awkward glare on your screen.

Fluorescent tube lighting is better, especially if you get daylight bulbs which simulate light from the sun. Either way, make sure that your light is shielded from you in some way.

Just as bad is no light at all. I'm sure we've all sat at the machine while it goes from daylight to dusk and then to pitch black night, but try to make sure you turn the lights on.



Indirect lighting is essential if you're going to be spending long periods sat in front of a monitor.

← Let's take setting up a company in order of which tasks to perform first.

1. Do you want to set yourself up in business? It might seem like an obvious question but you should be aware of all that it entails. Are you self-disciplined enough, do you need security to be able to sleep at nights and how long can you live without making a profit? These are all questions you should be asking yourself.

2. Decide what your business will be. Where will you work from, what services or products you will offer, what equipment will you need



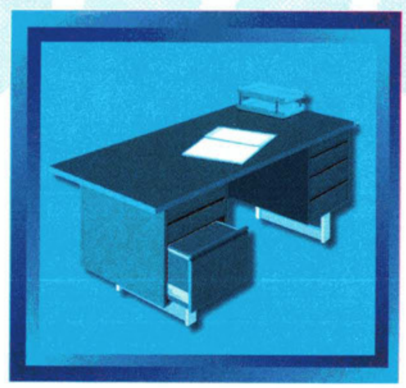
to start your business with? Who will you need to talk to about setting up your company and what sort of company will it actually be?



Could you cut it as a freelance artist in the business world and consistently produce stunning images like this?

3. If you've decided that you can deal with all this, then you need to think about who your target audience is going to be. If, for instance, you are setting yourself up as a graphic artist, you need to think about who your clients are going to be and, more importantly, what they are going to pay.

This is perhaps one of the hardest parts of setting up a business. You'll need to think about what your competitors will be offering, how much they charge, why your company would be better for the client and so on.



4. You'll need to think about all the costs involved with starting and running your business and how you'll get paid, both by your customers and in terms of your salary. These are all things that can be done before you leave your current employment or before you sign off the dole.



A chair and desk set at the correct height are essential to avoid poor posture.

2. Sitting. Your desk and chair are equally important. Try to get a good quality desk, one with adjustable height if you can afford it. Extra 'returns' (side add-on bits for your desk) are also useful if you need extra space. A proper office chair with adjustable posture settings is a must. A wrist rest can help reduce the risk of RSI, although they do take some getting used to.

3. Environmenting (OK, so that one doesn't work). If, as I suspect, most of you will be starting your business from home, make sure you aren't doing it at the kitchen table. If you can't set aside a whole room for your business, at least mark off a portion of one room that will act as your office. Try to avoid having distractions like TV sets in your office, at least until you are firmly established. There's nothing worse than the temptation to watch *Teletubbies* when there are invoices that need to be made out.

4. Monitoring. One further point specific to Amiga users. A TV set isn't a good enough display device if the Amiga is going to be your sole computer. If you're going to be using a



spreadsheet on your Amiga to keep track of company accounts, and a DTP package or word publisher to make out invoices, you'll want to have a higher resolution screen than 640 x 256.

If you have an A1200 or other AGA machine, you'll have the ability to run your computer in Multiscan mode which should work on a VGA monitor, and which will certainly run on the MicroVitec multiscans.

Owners of older Amigas should consider buying a scandoubling device like the GrandTV Amazing box we reviewed last issue so they too can use a higher resolution. Most monitors these days are also far healthier for you than sitting a foot away from a TV screen, so there are benefits to be gained there too.

Of course, all these points don't mean that you should get discouraged from starting your business if all you have is a kitchen chair, a rickety table and a TV set, but this kind of equipment will help your image if you have customers visiting your workplace, and is better for your health too.

Like most business equipment, you can collect it all as your business builds up and you plough profits back into the company.



Not only will these points make your office look much more impressive and businesslike if clients visit you, they will make it a much safer and healthier place in which to work.

This is the thinking and planning stage. It'll be a lot of work, particularly if you have to undertake it in the evenings after a long day's work. It might also be a problem if you have to talk to potential clients or competitors whose hours are more office-like.

At this point you needn't have thought of a name for your company or products, we'll come on to that later.

> "... you really need to be the kind of person who can rely on themselves to get things done."

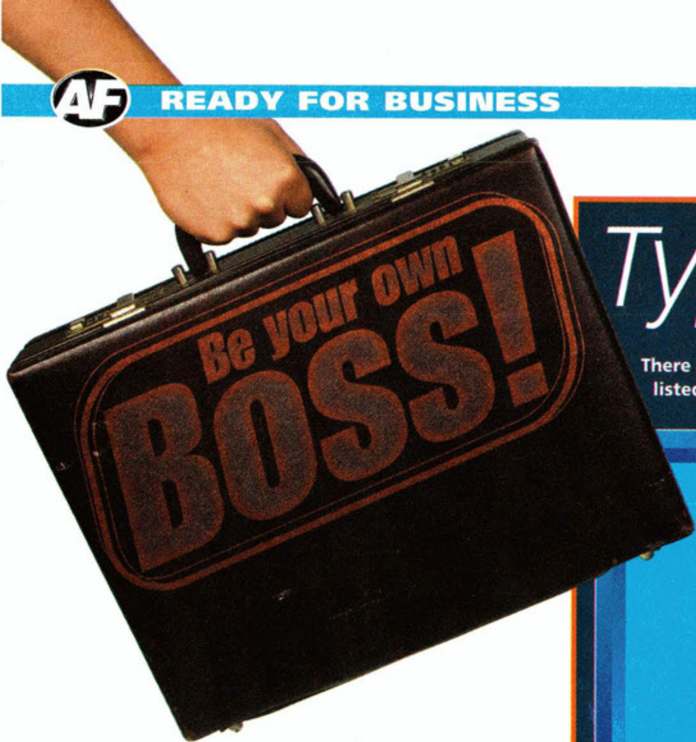
Let's go through this list in more detail. Our first point is that you really need to be the kind of person who can rely on themselves to get things done. As a small businessperson you'll also need to have other skills necessary for business. If you are the company's sole employee, you'll need to be able to sell to potential clients, to manage the company accounts and to deal with the other minutiae of business generally. If you're not the only employee then you'll have to add people management to your list of skills.

You may not have all these skills, but your local Business Link can help you train up for them and your local TEC will be useful for courses on things like book-keeping or sales techniques.

If you are married or have other dependents then the reasons for setting yourself up in business have to be explained to them. It can help, since you can then pressgang the rest of the family to help you with your work, sealing envelopes for the kids, accounts for the wife and so on (it's just an example! I'm not being sexist or ageist, honest!). However, starting your own business without the blessing and full support of your family can be a very hard thing and might result in you having to make the unenviable choice between work and family.

The money aspect of it is just one facet. There will be hard times ahead

Continued overleaf ➡



Types of company

There are several different types of company that you can set up, the most common of which are listed below.



1. Sole Trader. This means you! You can set up as a sole trader with very little difficulty. You'll need to inform your local tax inspector and contributions agency, which you can do with a form (CWL1) which is available at any tax office.

The major downside to being a sole trader is the fact that you will be fully liable for all debts incurred by the company. This means that you cannot separate your personal wealth from that of the company, and if your business fails you can lose everything.

Sole trader status is fairly easy to obtain, but remember that you will be fully liable for any debts your company makes.



2. Partnership. You can form a partnership with someone, but make sure it is a legally binding one. You should get a solicitor to draw up partnership papers, but sit down with your prospective partner first and draw up a list of responsibilities. This should include how much money each partner will put in and how the profits will be split, what will happen if one partner dies or decides that they want to give up and so on.

In a partnership you will be jointly liable for all debts incurred by the company and one partner can still be held responsible for the debts the other partner has created. Again, this is a full liability deal.

Partnerships should be legally binding, and again you are fully liable for any debts incurred.

3. Limited company or Public Limited Company. Limited companies are time consuming and awkward to set up on your own, so a solicitor or accountant is needed here again. However, you can buy an 'off-the-shelf' company, which saves a lot of the hassle, for about £150. Public Limited Companies are probably going to be out of the reach of our readers, since they need to have share capital of at least £50,000. With a Limited company, directors only have a limited liability but the rules are far more stringent.

4. A Co-operative. A co-operative is a company run by its workers. Co-operatives aren't very common but can be good to 'beef up' the appearance of a company so it presents a common face, when in actual fact it is a collection of individuals all working together. Co-operatives are also strictly controlled and require a minimum of seven co-operative partners.

As before, your local information centre (bank, Business Link, etc) can provide you with detailed information on the pros and cons of each type of company, but setting yourself up as a sole trader is by far the easiest way to go. When you ask about different sorts of company types, you should also ask about the tax and VAT benefits and the problems that each type of company faces.

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when you start your company and money will be tight, unless you are incredibly lucky. You must be honest with yourself, and your partner, about this. It's likely that you won't be taking a family holiday for a while, not just because of the money but because you need to be available for work.

If you are running your business from home it adds extra problems, such as the line between working and being with your family, being interrupted by them or getting phone calls. Your Local Enterprise Agency may have very cheap office accomodation available to you. If you are going to work from home, it is best to clearly delineate working times when you should not be disturbed.

Our next point is more organisational. What sort of business will you have? If you are going to offer a service then, as we said before, it's quite likely that you won't need to spend much money on equipment. However, you'll still need to decide on your pricing structure for the services or products you offer.

You'll also need to work out what sort of company is going to best suit you. Most people working from home will probably start off as sole traders, but perhaps being a limited company might be better for you, or possibly even a co-operative if you think you'd be better off working with other people to offer a full range of services.

The third step is possibly the most important to the success of your business. When you go to see the bank about a new account, a loan or one of the other organisations mentioned about a grant, you'll need to have a business plan which should take into account your market. You can't just postulate that you'll make a million in your first year as everyone you talk to will want to know exactly how.

> "It's not a question of saying 'because mine is better'. You have to be brutally frank with yourself about your product."

You should examine the market you are about to enter in great detail. If you are going to be selling a product, like software, you'll need to know all about competing software in the marketplace and why someone should choose yours. It's not a question of saying "because mine is better". You have to be brutally frank with yourself about your product.

If you are offering a service it can be even trickier. How much should you charge for a picture? What about a website or a song? These questions can be solved in two ways. The first is to call around people offering similar services and find out how much they charge.

The second is to work out exactly what creating a picture or a song costs you. It might seem silly, but this should take into account how much electricity you'll be using on it, what your phone costs are going to be and so on. You'll also have to add in what you expect to get paid, what your staff or partners will get paid, plus your margin for profit.

You really need to use both methods. Without doing so you might find out that Websites R Us are offering to do HTML for £35 an hour which you reckon is outrageous! You could do it for £10 per hour, or so you think until

What's in a name

One of the things you'll have to think long and hard about is the name of your company and/or your product. Services won't have names unless you offer differing levels (a gold, silver and bronze service, for instance), but the name of your company is vitally important. You can't completely change it once you've started unless you want to lose credibility with potential customers and you have to be careful that the name you choose hasn't already been taken by someone else, or translates in a foreign language to something you wouldn't want. Bum crisps might sound fine to Spanish crisp eaters, but I'm fairly sure they wouldn't be most British people's crisp of choice!

The translation side of things is proving much easier for people these days, thanks to the overwhelming presence of the Internet. You should be able to find Amiga users around the world who can tell you that by calling your company 'SenzuriSuru' (well, you might), you might actually be offending some Japanese people. The Internet can also provide a handy sounding board for trying out new names for your company or product, but don't take the answers you get too seriously.

Suggestions for company names usually revolve around your name (Joe Smith Trading), the type of product or service that you are offering (Digital-anything for a graphics company perhaps) and completely made-up names are good for products (things like nylon or kevlar are very good examples of this).

You should also consider the area of the market you're going to be targeting. Are you approaching the 'cheap and cheerful' crowd or do you want to go for the 'luxury' customers? Choosing a name appropriate to your aspirations and those of your customers is important too. Calling your product 'Blahblah Gold' or 'Tum-ti-tum Professional' will give a different impression to say, 'Blahblah Basic' or 'EZ Tum-ti-tum!' Printing your letterhead and business cards on dayglo paper will give a different impression to using navy blue and gold. Make sure you get this kind of thing right at the beginning and it will help you forever after. As with most things, your handy clutch of advisers at the bank and Business Link can give you a helping hand with this.

LiveWIRE™ accelerating young business ideas

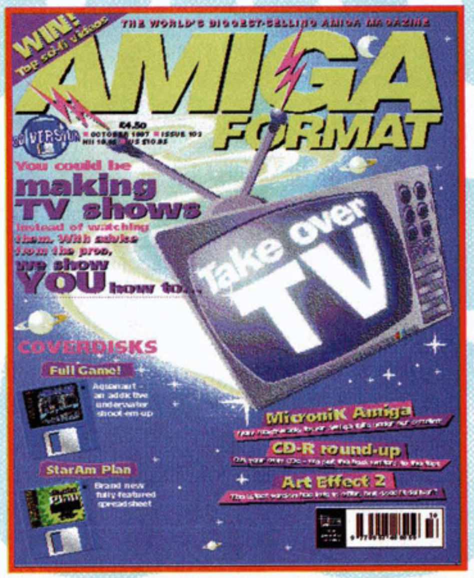
Names are vital in business – as you would imagine, Gateway 2000 is likely to attract a different sort of client than dogsbollox.com! (below, left).

e-mail with attitude dogzbollox.com

GATEWAY2000 "You've got a friend in the business."®

QUAKE







With recent articles on making your own Shareware software, TV shows and music, *Amiga Format* is an excellent source of ideas, information and inspiration, and could be a good place to you to advertise your business!

you check out what that hour of your time actually costs you.

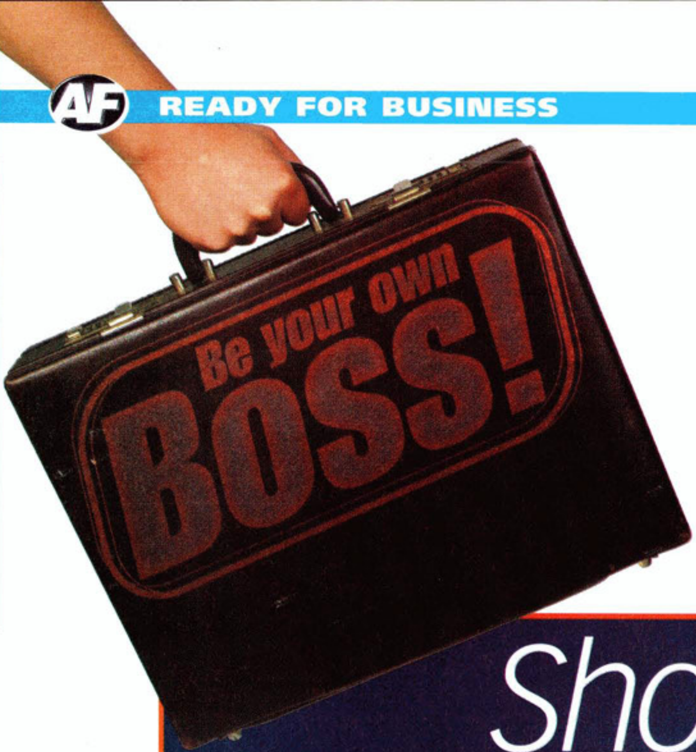
Pricing yourself out of the market either way is a very dangerous habit and one that can only be cured by knowing exactly what the average going rate for your product or service is.

The other thing you'll need to do is to work out what your potential market is – how many people will need what you offer. If you are only going to be offering your services to other Amiga users, your task might be easier than trying to work out how many people and companies have websites that you could be creating. However, you will still have to work out what the total number of potential customers is and what percentage of that number you can convert to using your company. Sounds like fun, doesn't it?

Lastly, you'll have to determine what the running costs of your business are going to be. You should check with the people who can advise you, like your solicitor, your bank, the Business Link and so on, about the costs of running a business from home or from an office and what sort of twists and turns there are that you can take advantage of.

You may decide at this point that your business won't be viable if it's full-time, but that's OK as these people can

Continued overleaf ➡



help you with that side of things as well.

As a new businessperson, you'll find that the collection of software on your machine will have to grow somewhat. Typical additions to your collection will almost certainly include things like spreadsheets for profit and loss forecasts, word processors for invoicing, mailshots and company letters, and perhaps an accounts package, although you could use a spreadsheet.

If you don't want to get a dedicated fax line, you may well find that a fax modem and a piece of software like *STFax* will help you offer a good service to your customers. You may well find that add-on hardware like CD-ROM writers or a Zip drive become essential too. A database to keep customer details in is also a vital tool Phew!

Finally, remember that this is just a little guide to get you going and give you ideas. Speak to the real experts and you'll get the absolute best advice that there is – that's what they are there for.

If after all this you still decide to go ahead with starting your business plan and looking up your local TEC or Business Link, we at *Amiga Format* wish you all the best with your endeavours.

Shout about it!

Advertising is another area which must be taken into account when starting a new business. Without it, no-one will know you exist. Too much of it, or the wrong sort, will soon mean that your company doesn't! Whether you choose to target your customers via a website, through direct mail attacks or by taking ads in magazines, like, say, this one, will depend on exactly what you are offering and what end of the market you are aiming at.

A website is an easy option and doesn't have to cost too much. You can even sell to anywhere in the world. The only problem with websites is the fact that they are 'passive' advertising. You can't force people to look at your page. Sure, you can take banner advertising on another site (try to do this by swapping banners, rather than paying for the service), but someone still needs to click on the banner to get to your site.

You can even offer secure sales over the web without requiring merchant status in this country (the ability to charge credit cards) by using First Virtual. It's cheap and easy to use, and even though you won't get paid for a while, it may still be worth looking at (go to http://www.fv.com).

Other options include direct mailings. This is where you pay for a database of names and addresses so you can send out a letter to a prospective customer offering your services. The only problem with this approach is that many people dislike junk mail and won't look at it on principle. The same applies if you try to send UCE (Unsolicited Commercial Email) and you can be chucked off your ISP's server. The final and most expensive method of advertising covered here (anyone want to know about TV or radio advertising?) is in magazines. HTML coders, musicians or artists won't need to (or want to in many cases) advertise in Amiga magazines, but you still need to find the best ones for your market.

Magazine advertising really doesn't work for a one-off ad campaign. You really do need to make a commitment for half a year or so to ensure that people take notice of your ad. Otherwise they tend to think that you might have gone bust, or it's a case of "out of sight, out of mind".

A website is a cheap and effective way of advertising your business, but there are other, less passive, options available.

OI! THAT'S MINE!

One thing you have to be very careful of in business is not treading on anyone else's intellectual toes – and making sure no-one treads on yours. Patent and copyright law is a murky part of the British legal system, and one we don't have the space to go into here, but suffice to say that terms like "passing off" will become of utmost importance to your company. If you are going to be making something rather than offering a service, you should consider the ramifications of getting a patent or copyrighting your product via a trademark or registered trademark.

Be warned, however, that anything you do to protect your invention is hard to maintain, particularly if you have to go to court over the issue. Because court cases of this nature go through the civil court it means that you'd better have extremely deep pockets to be able to see it through. Speak to your local Business Link advisor to get more help on this section of the law.

There are some books that are acknowledged as being helpful:

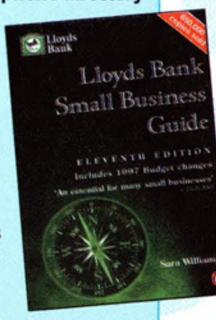
- ***How to Make Money From Your Software – Legal and Business Aspects* (ISBN 0 906214 31 9) by Anne Staines and published by ESC Publishing.**
- ***The Protection of Computer Software, its Technology and Applications* (ISBN 0-512-42462-7) edited by Derrick Grover and published by Cambridge University Press.**

Both books are fairly old, but still have relevant details.

FURTHER INFORMATION

You can contact the organisations we have mentioned at the numbers listed here:

Association of British Chambers of Commerce:	01203 694484
Federation of Small Businesses:	01253 720911
The Forum of Private Business:	01565 634467
Instant Muscle:	0171 603 2604
The Prince's Youth Business Trust:	0171 543 1234
Shell LiveWIRE:	0345 573252
The Small Business Bureau:	01276 452010
Business Link	Local telephone directory
Direct mailing companies	Local telephone directory
TECs (Training and enterprise Councils)	Local telephone directory



A very good general reference book which isn't biased (although it has the Lloyds logo on the cover) is the *Lloyds Bank Small Business Guide* (ISBN 0-14-0268836-7 priced £12, but Lloyds give it to you if you open a business account with them). It's published every year, so the information is usually pretty up-to-date and very thorough.

I must thank a number of people for all their help with this feature, without whom it certainly wouldn't have been as interesting or thorough. In no particular order:

Jane Ball from Lloyds Bank in Bath, Julian Newton from Barclays Bank in Bath, Joanna Eustace from Business Link West in Bath, Brian Butcher at Shell LiveWIRE in Newcastle, Claire Winterton and Tina Rhodes from the Prince's Youth Business Trust in London, Errol Madoo from EMComputergraphic in Clacton, Simon Goodwin, freelancer from the Midlands, and Chris Wiles from Active Technologies in County Durham, who gave me the initial inspiration for this piece.

Old Commies Emulation



Simon Goodwin checks out another mixed bag of emulators.

AFCD23:-In_the_Mag-/Emulators

ON THIS MONTH'S CD

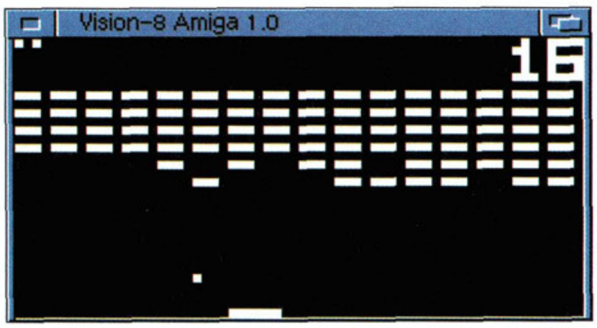
This month we test emulators for lesser-known Commodore home computers – the VIC-20, precursor of the C64, and the Plus 4 and C16. We also examine emulators for Vision-8, BK0010 and the ColecoVision console.

OLD COMMIES #1

Commodore's VIC-20 sold millions worldwide, thanks to a good keyboard, passable sound and reasonable graphics. Though limited to just 23 lines of 22 characters on the screen, the small number of character cells in a complete screen meant programmers could obtain fast pixel-addressable colour graphics by redefining characters. At that time, rival systems were stuck with preset character shapes or mono bitmaps.

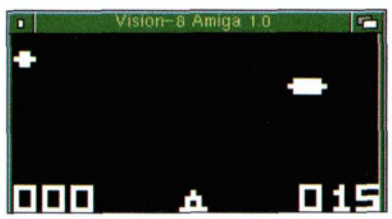
The name VIC-20 is not auspicious. The 20 refers to the internal memory, but the majority of that is fixed ROM code, derived from the earlier PET. Only 3K is available for the user. The emulator offers the option of 3K, 8K or 16K expansion memory, enough for virtually all of the available software.

The letters stand for Video Interface Chip – the C64 equivalent is labelled VIC-2 – but sounds distinctly rude in countries which pronounce the letter V as an F. Caught out before with the Commodore PET (Personal Electronic Transactor, or 'Commodore Fart' to Francophones, infringing a Philips trademark for good measure), you might expect CBM to choose names more carefully. But it's not just computer firms that run into name translation problems. The Rolls Royce



Vision-8 is a minimalist emulator, in every sense





Silver Mist slid down the pan in Germany, for similar reasons!

The Amiga VIC emulator is pretty good, though the documentation leaves something to be desired. It runs from an icon and has a conventional close gadget. A configuration file sets up system ROMs and RAM expansion.

> "The Amiga VIC emulator is pretty good, though the documentation leaves something to be desired."

You get two versions, one for old 68000 Amigas, inevitably pretty slow, and one for 32-bit systems, which runs at a quite acceptable speed given a little fast RAM for the CPU emulation. The VIC's 6502 processor is easy to emulate, and the small display means it runs well on anything from a 68030 upwards.

CONTACTS

This *AFCD* includes Vision-8, the embryonic Coleco emulator and the more useful combination of FMSX 1.4 and Mission. There's the C16 and Plus 4 emulator A4, an updated 1541 disk file system, and version 0.65 of the VIC emulator, with system ROMs and Cosmic Cruncher. VIC-20 games appear on FTP sites and the commercial *Flash ROM* and *Emulation Unlimited* CDs.

Console emulators continue to advance rapidly, with six updates on the CD – two very early Super Nintendo (SNES) emulators, two improved NES ones, plus AmiMasterGear and a new port of VGB with better Amiga integration.

FTP SITES

CBM +4, C16 & VIC emulation:
nic.funet.fi /pub/cbm/

Coleco:
ftp.komkon.com

VIC-20:
ftp.hrz.uni-kassel.de /pub/machines/vic-20

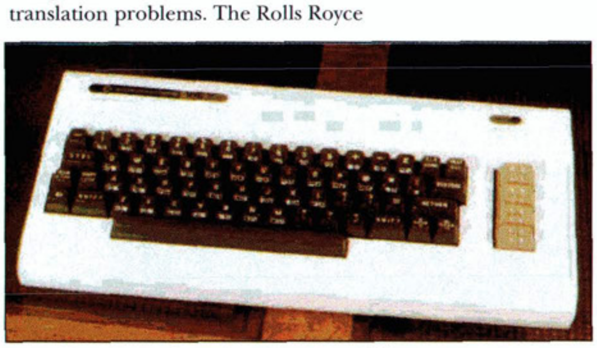
WEB SITES

Coleco:
http://www.gamepen.com/gamewire/classic/classic.html

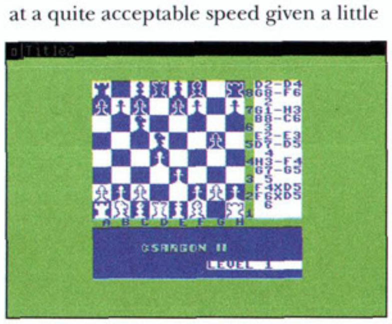
Mission:
http://www.komkon.org/~dekogel/mission.html

VIC-20:
http://www.geocities.com/SiliconValley/Way/1038/

Vision-8:
http://www.komkon.org/~dekogel/vision8.html



Commdore's VIC-20 introduced the C64-style box.



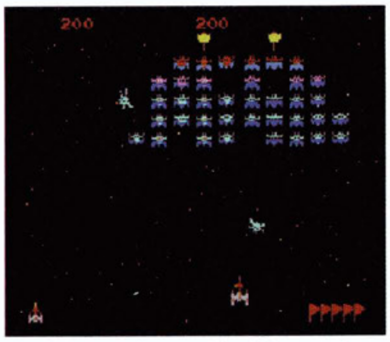
Sargon was the first micro Chess program to play a reasonable game.



The VIC screen means a rather squashed *PacMan* maze.


Our Ben honed his keypad skills on a ColecoVision console.

COLECO VISION


The Coleco version of *Galaxians* looks pretty authentic.

The screen is rather narrower than it should be, occupying only about half the Amiga display area on a PAL screen.

Quick Amigas must be slugged to run programs at a proper speed. Command line arguments set the rate of keyboard and screen access, but I needed to clobber my Cyberstorm with CPU NOCACHE to render games playable. The default updates one screen frame in four, which is fast but rather jerky. The tooltype SCREEN=0 boosts redrawing to full speed, and is quite efficient as a delta buffer seems to be employed.

Sound is reasonable but you only get pure, rather clicky, notes because it lacks support for random noise.

Keyboard handling is authentic but rather irritating as the cursor keys don't work as normal.

Just like a real VIC or C64, you must press SHIFT to move upwards or left, and the Amiga key that normally scrubs out the last character zooms the cursor disconcertingly to the top left corner of the display.

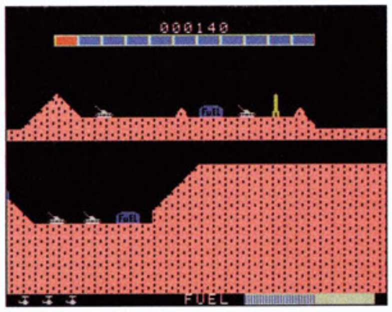
> Keyboard handling is authentic but rather irritating as the cursor keys don't work as normal.

TRANSFERS

You can transfer programs via the VIC user port and a cable to the Amiga parallel port, although you need both machines in the same room to do this, and must type in a short program at each end to manage the transfer.

Amiga C and 6502 assembler source is provided. If you can read eight-bit ROMs then it's easy to transfer cartridge games. Indeed, many of the games on emulator CDs appear to have been moved in that way.

Another neat way to move programs is via the 1541 disk format, given some VIC software already on old CBM diskettes. The venerable C64 drive was developed for the VIC-20, and can be connected to the Amiga and accessed with PD handlers written for C64 emulators. The CatWeasel add-on disk


Coleco *SuperCobra* running – just about – on fMSX and Mission.

controller can access these via a 'standard' 5.25 inch floppy disk drive, with its own 1541 handler.

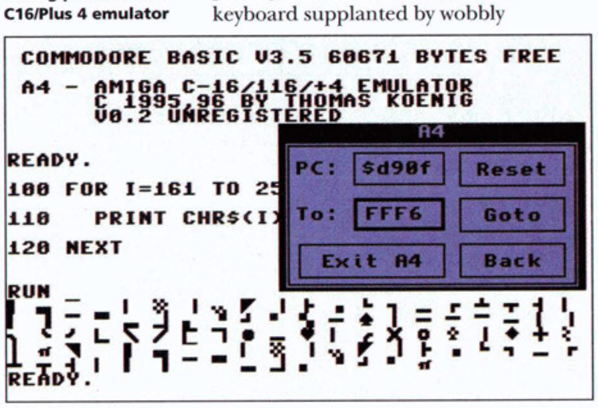
The original author, Pieter van Leuven, is having problems with his Amiga, but he has passed the source to Milan Polle, who has taken time off from his PPC developments to work on the next version, with a GUI, better sound, graphics and compatibility. He's eager to hear from existing users.

PLUS 4 AND C16

Flushed with success after the Commodore 64, the follow up to the VIC-20, Commodore produced some peculiar low-cost variations which were less successful, although mass produced in large numbers in the late eighties. Like many eight-bit machines, these were based on Chuck Peddle's minimalist 6502 processor.

The C16 was an economy version with the main selling-point of the C64, the 64K memory, slashed to 16K. ROM cartridges and special versions of simpler C64 games were produced for the C16, and for a while it was well-supported with budget cassettes. However, the addition of extra ROM holding an editor/assembler and much-improved BASIC wasn't enough to bring it out from under the C64's shadow.

Another attempt to cut costs brought forth the obscure C116, a re-packaged C16 with the typewriter keyboard supplanted by wobbly calculator-style keys. C16 software also runs on the C116 and on the expanded Plus 4 variant.



Graphics are not the strong point of the C16/Plus 4 emulator

Plus 4s have 64K memory like C64s, and the extra ROM of the C16, packaged in a slimline black box with 32K of additional 'business' software on ROM. The name comes not from Edwardian trousers but from the inclusion of four productivity programs in the ROM, making the Plus 4 a rival for integrated business bundles like Sinclair's QL, or so Commodore hoped. Unfortunately the built-in software was too feeble for serious use.

A4 is the Amiga's emulator for Plus 4, C16 and C116 computers. It has reached version 0.2 and is stable and quite usable in BASIC, but needs more work on the keyboard and graphics emulation. I tried some Plus 4 programs from the FUNET archive, which also holds the necessary ROMs, and found that the scores and text messages appeared correctly, but not the graphics.

The AmigaGuide is not very helpful, merely telling users "Don't use the GRAPHIC command", at least until version 0.3, and promising updates for colour and sound.

The registered version of A4 costs a mere $5, and can load and save to Commodore disk drives as well as files on Amiga drives. You must know the name of the file you want to load, as there's no way to load a directory yet and the demo cannot save to any drive.

A4 runs on a private screen in PAL, NTSC or VGA mode. It requires Kickstart 2 and at least a 68020 with fast memory. It's noticeably faster and more stable than version 8 = 232 the initial PD release, but still needs a lot of work.

COLECOVISION

ColecoVision consoles came from the toy firm behind the Cabbage Patch dolls and sold six million in two years. They're based on the same Texas graphics chip as the TI-99/4A, Britain's Memotech and Einstein, and Japanese MSX micros, with reasonable sprites but no hardware scrolling. A later computer version, the Coleco Adam, added a printer and some 'floppy tapes'.

The story of Coleco emulation on the Amiga is rather sad. The emulator on Aminet is unfinished and was released without the knowledge or consent of its author. It's more effective to use double-emulation, running Coleco software on top of MSX emulation as Coleco hardware is closely related to MSX.

Aminet's ColEm.LHA is an unfinished port of Marat Fayzullin's Coleco emulator for Unix boxes. The Unix ColecoVision emulator was based on fMSX, substantially rewritten for the Amiga by Hans Guijt. Hans set about adapting fMSX into a Coleco emulator,

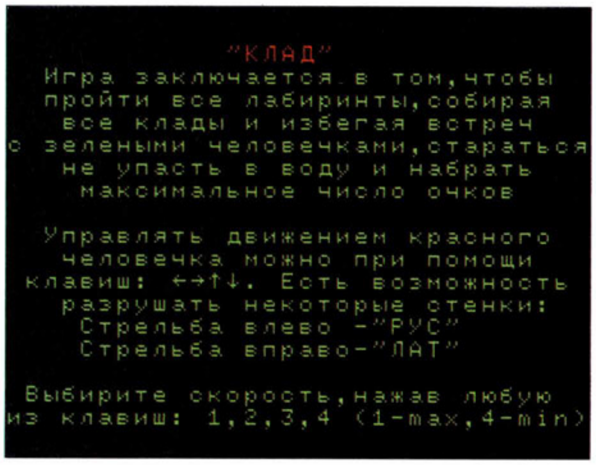
Continued overleaf ➡

but gave up because it didn't work, except on games that already ran (in their MSX incarnation) on fMSX. He could not pinpoint the problem without a real ColecoVision, and he'd never even seen one.

Generous soul that he is, Hans offered the unfinished sources to four other coders, on the promise that they would not release the buggy code. However, someone broke this agreement, and now he gets several messages each month asking why his emulator doesn't work. ColEm should never have been released.

Hans is considering building Coleco emulation into fMSX, but this is not a priority. Meanwhile Mission, a Coleco emulator for MSX, has arrived. This runs via MSXDOS on Amiga fMSX. It's not perfect, but it runs better than ColEm ever did. It's a long way round, but so far is the best option.

Meanwhile Juan Gomez's MSX2.4 was intended to include Coleco emulation, although I could find no sign of it in version 2.51, which lacks any documentation. Development of Juan's emulators was always sporadic and is slowing because he's got a new job, but Coleco emulation is certainly on his 'to do' list.



KLAD-1 has simple instructions – in Russian of course.

VISION-8

The prize for smallest programs must go to Vision-8, which emulates CHIP8 systems. These were very simple games written in a portable pseudocode for old micros and Coleco consoles. The Vision-8 emulator also runs on MSX, MSDOS and Unix. Full C source code has been provided.

Programs are selected from a standard requestor after clicking on the icon. The eight sample games total a little over 2K of code, and include sliding block puzzles, bat and ball games and a sub-*Invaders* shoot-em-up, rendered in uncompromising chunky monochrome, *TellyTennis* style. There's even a beep, although just the one.

Vision-8 runs in an Amiga desktop window, or optionally under the Amiga version of X-Windows. It requires Workbench 3 and a 68020 or better.

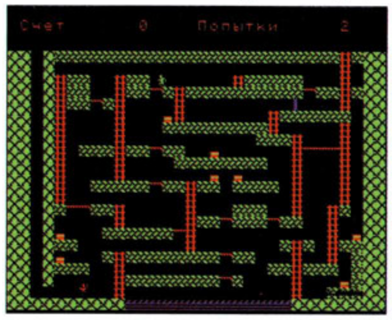
Documentation is scant and control is minimal. Amiga joysticks are not supported so you must used a preset rectangle of keys to emulate a 16-key matrix keypad. Vision-8 is a curio, fine as far as it goes, but that's not very far.

OLD COMMIES (2)

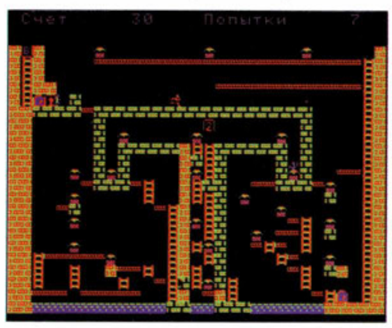
BKemul is perhaps the most bizarre emulator to arrive on Aminet in recent months. It does a great job of emulating the BK0010, a Russian-made computer with home micro-pixel graphics and a rip-off minicomputer processor.

The BK0010 was launched in Moscow in 1985, the same year as the Amiga 1000. More than a million were made between then and 1993. They're not particularly fast, perhaps a quarter of a MIP with a following wind, but they're exceptionally easy to program in 16-bit CISC assembly language.

The processor is a PDP-11 clone, based on DEC's minicomputer design, perhaps the most elegant processor ever made. I cut my teeth as a professional assembler coder writing CAD software on a PDP-11, and it led me, among others, to the 68000, even though Motorola's processor isn't quite as orthogonal as its DEC inspiration.



Platforms and ladders, Russian-style.



KLAD spawned the inevitable souped-up sequel.

> The last 18 months of eager emulation activity has brought a dozen or more major updates to emulators...

Apart from obscurity, there's little to fault about BKemul. It's fast, free and friendly. It comes with well-written assembler source code and good documentation, in the form of HTML pages for any Web browser, which look better than the usual AmigaGuides, with neat tables and diagrams.

BKemul uses an Amiga PAL custom screen with an invisible close gadget, with 256 lines of mono or RGB colour and 512 or 256 pixels per line. The 4K geometric and plasma demos supplied are surprisingly good. The real thing drives two monitors simultaneously, one in mono and one in colour, from the same bitmap. On the Amiga, the HELP key toggles the displayed mode. Graphics cards are not supported.

Half of the 64K address space is occupied by an old-fashioned but comprehensive 23K BASIC interpreter and an 8K monitor ROM, with another 32K split between graphics and programs. Keys can generate Roman or Cyrillic characters and are toggled using left and right ALT. The original cassette interface is diverted to use the Amiga file system.

BKemu requires at least Workbench 2 and a 68020 with 1Mb RAM, and a 40MHz 68030 is recommended for full speed. The series of KLAD platform games supplied were too fast for joystick control on my 68060, though they were playable from the keyboard.

This is one for emulator, processor and Cyrillic enthusiasts, because I can't imagine that many *AF* readers have ever heard of a BK0010, let alone used one. But it is very well done, and will amply reward the curious.

NOW WHAT?

This is the ante-penultimate part of this record-length *AF* series. Now I've said it. The end is nigh. But the next article may be the most interesting of all. Next month, we check out UAE and Fellow, emulators that claim to run Amiga software on alien hardware.

We know that PC emulation is a challenge for Amigas. Even the fastest Amiga makes a sluggish PC. But is the reverse true? Is it realistic to abandon Commodore's hardware and run your favourite programs on an Intel box?

We'd be shirking our responsibility if we did not give the same scrutiny to emulation of the Amiga that we've shown to emulation on the Amiga, especially as Cloanto have launched a commercial Amiga emulation package, 'Amiga Forever', with the blessing, and licensed ROMs, of Gateway 2000.

The last 18 months of eager emulation activity has brought a dozen or more major updates to emulators previously reviewed, and some of them have been utterly transformed since I first looked at them.

There are several loose ends that need to be cleared up, like the prototype SNES emulators, vintage CP/M, TI 99 and pure CPU emulators which deserve brief mentions. After all this effort, we'd hate to miss anything.

The ultimate part of this series will fill in the gaps and look back over recent progress. The fat lady's on the horizon, but she's not singing yet...

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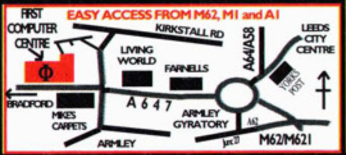
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SCREENPLAY



Yes, well it may not be the best photograph in the world but I hope I've managed to get the message across that I'm happy. Despite the fact that we've had no new games to preview this month, we've had three to review and our previews round-up shows we've got loads more waiting in the wings. Pay close attention to our Games Check this month because there have been some cracking games over the last few months that really should be in your collection, and for just a few quid you could help to keep the Amiga alive and have yourself some serious fun at the same time. The developers have done their bit so it's our turn now. Vote with your wallet and give yourself a treat. Only after you've read the rest of the mag, of course...

Andy Smith

AMIGA FORMAT'S REVIEW POLICY

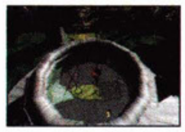
WHAT OUR REVIEW SCORES MEAN

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up to date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

90+%	The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold – the most highly prized rating there is.
80-89%	These games are very good, but due to minor flaws are not the finest examples of their genre.
70-79%	Good games which are worth buying, especially if you have a special interest in a game type.
60-69%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
50-59%	Below average games which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Under 40%	The absolute pits.

The latest games, the handiest hints and some clever programming from you!

Previews

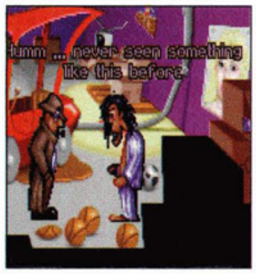


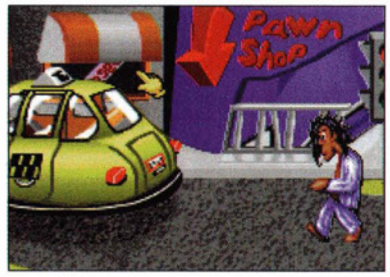
Many games have been promised to us over the last year and some of those are still to arrive. Andy Smith keeps you up to date with what's still to come...

Sixth Sense Investigations

FIRST APPEARED AF96. DUE MARCH 97. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: SLIM.

This arcade adventure has the player in the role of a private detective on the trail of some wayward cheese. Ahem. Their idea, not mine. The game's apparently in the same sort of mold as *Day of the Tentacle* and other wacky adventure games. We're turning blue holding our breath for this one and it looks like we're going to get a lot bluer...



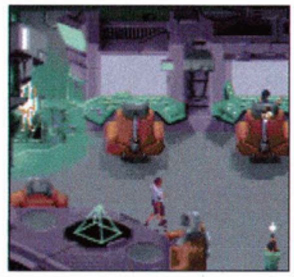


Wacky cartoon graphics and wacky puzzles await – if we ever get the chance to see the game that is.

Wasted Dreams

FIRST APPEARED AF97. DUE SOMETIME THIS YEAR. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: FAIR.

This one's another adventure but with more action. This 12-14 disk epic is apparently based on: "Mystery and suspense from a gigantic alien adventure in a violent reality." Whatever that means. With some 300 animated sequences of the game's characters taken from film, this one promises to be a bit of a looker and if Vulcan can continue in the same vein as their last couple of releases, one to look forward to.

Graphic adventuring awaits in Wasted Dreams. This one's definitely going to appear. No, really.

Alien Presence

FIRST APPEARED AF97. DUE SOMETIME THIS YEAR. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: VERY SLIM.

It's a shame we're not going to be seeing this in the near future because it sounds like a cracking resource management game with combat. The idea's to build up a town to make money and then spend the money making weapons to fight the six alien races you're battling against. There's trading, fighting and empire building to be done, so hopefully this will eventually see the light of day.




Alien Presence – this one could be a bit of a corker if it ever sees the light of day.

Myst

FIRST APPEARED AF97. DUE SOMETIME THIS YEAR. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: VERY GOOD INDEED.

This huge graphic adventure is all about clever puzzles built around amazing graphics and excellent sound effects. The player's in no hurry to complete the tasks set, there's no dying and there's no killing anyone else. This is going to be one of the year's biggest games. Expect a full review in the near future.

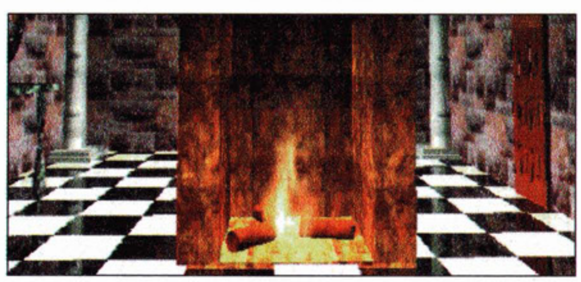


Myst has been on everyone's lips for the last six months at least. We should have a review of this in next month's AF.

The Haunting

FIRST APPEARED AF98. DUE SOMETIME. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: VERY SLIM INDEED.

This is a multi CD (it'll be on five of them in total) *Cluedo*-style murder mystery graphic adventure that's due to be released some time after the Power Amiga's taken off – you'll need a whopping spec just to get the game to run at all. With graphics fully rendered in *Lightwave*, real video footage and spoken dialogue, this should be a visual and aural treat.



The Power Amiga's going to have to take off before we get to see the impressive-looking Haunting.

Hell Pigs

FIRST APPEARED AF98. DUE FEBRUARY 97. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: FAIR.

Vulcan are trumpeting this as the "biggest action adventure to ever to hit the Amiga" (sic). It's all about a bunch of mercenary hardmen called in to investigate the mysterious happenings following a recent alien visitation.

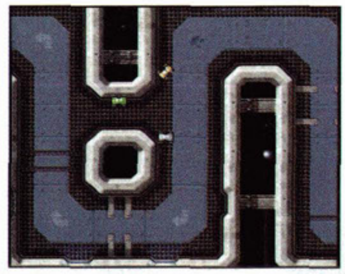



The sheer size of Hell Pigs could be a major factor in why the game's slipped quite so badly as it has.

Max Rally

FIRST APPEARED AF98. DUE SOMETIME THIS YEAR. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: SLIM.

This is due to be the first release from a new development team called Fortress and it's an overhead racer in the same mold as *Micro Machines* and *Supercars*. With 30 tracks and four-player simultaneous play, this should be great fun. Just when it hits the streets is a bit of a mystery at the moment, though...

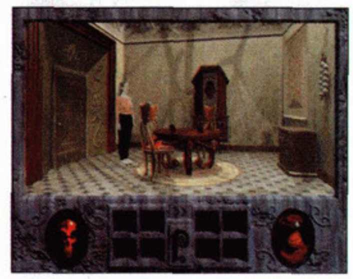



Overhead racing action from new boys Fortress in Max Rally.

Phantasmagoria

FIRST APPEARED AF100. DUE SOMETIME LAST YEAR. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: SLIM.

Another adventure game that may or may not see the light of day is *Phantasmagoria*. The game's based around a newly-wed couple who move into their dream home, an old mansion, and then become entangled in all kinds of nastiness after Adrienne (the new wife) discovers a secret room that used to be used for Satanic purposes. Gulp.

Satanic storylines and fabulous graphics could await us if Phantasmagoria comes onto the market.

Genetic Species

FIRST APPEARED AF101. DUE OCTOBER 97. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: FAIR.

Vulcan have also got a first-person action game nearing completion in the shape of *Genetic Species*. The aliens are at it again and it's down to you to give them a bit of a slap. Vulcan are well aware that there has been a glut of these games of late, so they're determined to make this one stand out. We'll see if they've managed that in the not too distant future, all things being equal.




Genetic Species, Vulcan's toe in the water of Doom clones. Coming soon.

Gloom3

FIRST APPEARED AF102. DUE SEPTEMBER 97. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: FAIR.

And as if to illustrate the point made about there being a glut of *Doom* clones of late, here's another. This is the third *Gloom* instalment and this time you're fighting against the dead. Blast 'em and watch their bloody limbs go flying around the screen. You know the drill by now...

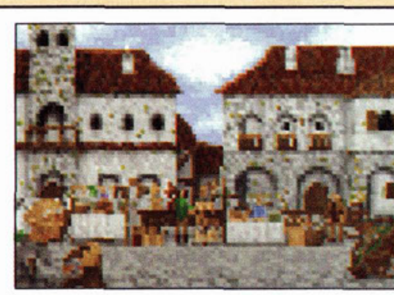



Another year, another Gloom. Different levels, different baddies, and better gameplay?

Magic Island

FIRST APPEARED AF102. DUE OCTOBER 97. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: SLIM.

Another game that's slipped is this Germanic role-playing adventure. Set in the year 762 on a magic isle, the game follows the adventures of a young lad travelling to meet his father. But, of course, everything goes pear-shaped and it's not long before the fighting starts.

Role playing adventuring that doesn't look like it's going to with us in the near future at least.

Super Skid Marks 2+

FIRST APPEARED AF102. DUE SEPTEMBER 97. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: FAIR

This is essentially a re-release, except the game's going to be published on CD. Having said that, there have been a couple of tweaks and additions made to the seminal cars-driving-like-loonies-round-little-tracks game, including a whole bunch of new vehicles and other things.





Super Skid Marks 2+ gives CD owners the chance to play an enhanced version of the popular racer.

Pinball Brain Damage

FIRST APPEARED AF104. DUE SOON. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: GOOD

This is an AGA-only game featuring several tables and an editor to enable you to create your own. All the features you'd expect are included, such as multi-ball, and the producers are very proud of how the ball moves, especially on rebounds. Look out for the review of this one very soon.





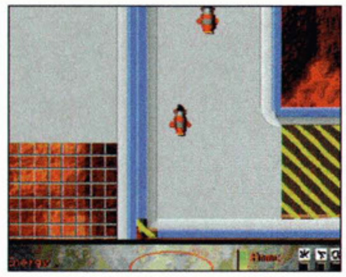
Flippin' heck! We haven't had a decent pinball game for ages. The drought could soon be over.

Skimmers

FIRST APPEARED AF104. DUE SOON. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: FAIR.

Due out shortly is this racing battle-type game. Four rival gangs are battling for control of a planet by winning bits of neighbouring territories in futuristic races, with lots of shooting while you're speeding around.





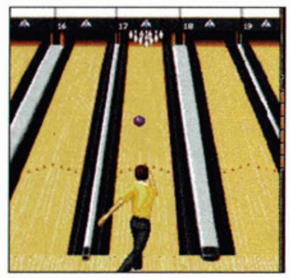
Racing and blasting action due to appear soon in the shape of Skimmers.

The Games Room

FIRST APPEARED AF105. DUE NOW. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: VERY GOOD.

Coming from Epic is this dual PC/Amiga CD featuring some 200-odd games. Some are re-releases of previous full-price titles like *Kingpin*, while the rest are your standard *PD Chess*, *Mah Jong* and *Scrabble* -type games.





Loads of old faves and the odd re-release on the huge CD that is the Games Room.

Desolate

FIRST APPEARED AF105. DUE SOMETIME THIS YEAR. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: SLIM.

There's a new platformer on the way featuring shooting, puzzle-solving and just a smidgen of adventuring too. Judging by the piccies you can tell it's going to be a looker, but you'll have to wait a while longer for us to be able to tell you whether it plays as well as it looks.





It's still very early days for the platformer Desolate, so don't expect it for a few more months.

Hard Target

FIRST APPEARED AF105. DUE SOMETIME THIS YEAR. CHANCES OF IT APPEARING IN THE NEXT COUPLE OF MONTHS: SLIM.

Finally, there's this *Virtua Cop* on the Amiga clone from the very prolific Vulcan. Again, it looks good but you're going to have to wait some time before we can tell you how it plays. And for all of you out there thinking "But surely you need a lightgun for this kind of game?" then take heart, because that's exactly what Vulcan are working on. Groovy or what? Now all we have to do is sit back and wait for all of these games to come through. 1998's shaping up well...





Vulcan's Virtua Cop-alike is coming along very nicely thank you, but it's still way on the horizon.

TOASTER 60% full, 267M free, 40

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Cu Amiga said "turn the lights down low, and stock up for the long haul, because Blade's the epic sort of game that if it grabs you, it can move the clock from 6pm to 6am very, very, quickly"

Cu Amiga 86%

Amiga Advis Denmark said "Blade represents one of the most missed types of games for the Amiga...buy it!"

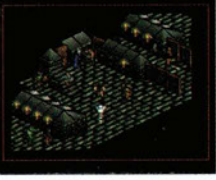
Advis Denmark 87%

Amiga Advis Denmark said

"If you like D&D just the slightest, then this is the game to buy"







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The Shadow of the Third Moon



Andy Smith's not the first person that springs to mind when there's a alien threat to be neutralised, but he's all we've got...

Yeah, well you'll all be thankful when I've saved the world yet again. Except that, erm, it's not this world I'm saving. Look, what difference does it make? I'm on the side of the goodies and everyone I'm killing is a baddie, so it doesn't really matter whether I'm fighting on Earth or on some obscure moon around a fictional planet, does it?

Good. Just be aware that in this game you're a pilot fighting through some 48 missions against a bunch of evil types. The action's mostly viewed from the cockpit. You can jump out of it for missile views and the like, but after a couple of minutes you'll want to climb right back in.

> **"Shadow of the Third Moon is one of the most playable and enjoyable games of its type for a very long time."**

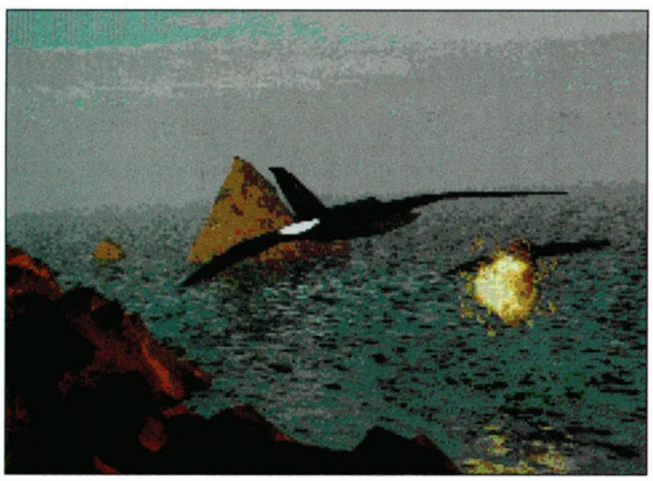




On patrol at one of your bases. There are no enemies around at the moment but they'll be here soon, you can rest assured of that, and the fur will fly then.



It doesn't look so impressive when static but the smoke trails are very impressive, especially when they're coming from a downed enemy fighter.



Here's hoping you don't get to see this screen very often, because it means you've been blown to smithereens and have to do the mission again.



After two short training campaigns which each consist of five separate missions, one flown in a bomber and one in a fighter, you then have a further three campaigns to fight against 'live' enemies, ranging from other fighters to laser towers and tanks.

There's been a great deal of attention paid to the learning curve, progressing from simple one-target missions to full-on, everything coming at you at once missions. This has been executed extremely well and makes you feel like you want to continue from one mission to the next because you know it's going to be a slightly harder challenge.

Thankfully, the programmers haven't penalised you for failing a mission. There's none of this dying and having to create a new pilot or whatever as you simply try it again and again until you get it right.

The missions themselves are nicely balanced and usually involve you being designated a primary target, say a couple of tanks in a valley, with a secondary objective like the laser turrets protecting the tanks, so there's always a nice balance of targets to go after.

You even get the chance to issue orders to a rather handy wingman who joins you on occasional missions. Simply call up a target, hit a key and your wingman goes after it. You may not actually want him to, because going after the enemy yourself is great fun, mainly because the controls are so lovely.

Forget your joystick and control your plane with the mouse in one hand, with your other hand over the keyboard ready to hit the keys that cycle you through the targets in range, the weapons at your disposal and so on, and you'll be playing the game as it should be played.

And you'll be having a lot of fun when you're doing just that. The mission structure is great, the action is intense at times without being too overpowering (mostly) and yet there's no idle waiting around for something to happen. You start each mission just outside the danger zone so it's never going to be long before the sparks begin to fly.

With the fairly limited building blocks the programmers have given themselves, they've managed to come up with a great, solid, enjoyable action flight sim.

The graphics are splendid, despite the fact that the landscape is horribly jagged when you're skimming over the ground. It's wonderfully fast, on an '030 at least, and some of the effects are very pleasing, including things like smoke trails from your missiles and burning enemy craft and so on.

However, the sound is a big disappointment. The sound effects grate after a short while and, although the music adds atmosphere, you wouldn't want to listen to it for pleasure, though that's a criticism you could level at just about any game music that's ever been written.

Shadow of the Third Moon is one of the most playable and enjoyable games of its type for a very long time. If you've got a souped up A1200 then you're going to be stuck in front of the monitor for a good long while, but maybe not quite long enough which is why I've shied away from actually giving it an *AF* Gold award. This is because the missions tend to be on the quick side, but there are certainly enough of them to justify purchasing the game.

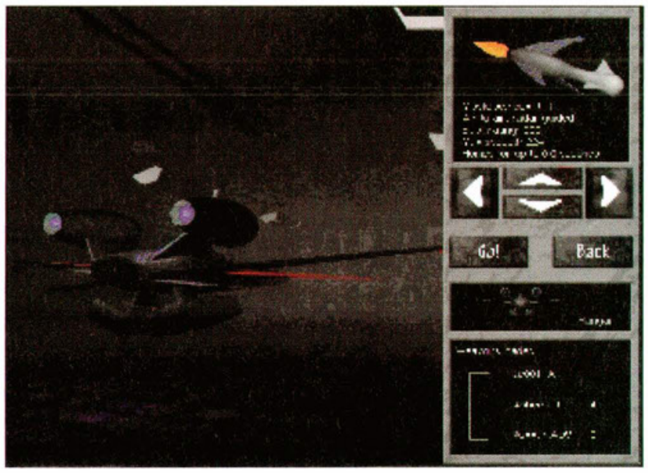
So there you have it, a great game that's going to entertain and excite you. Another fine reason to sneer at anyone who says the Amiga games market has had its day.



An enemy heavy bomber moves into your sights. You're in the fighter craft at the moment which is armed with four laser cannons, so it will only take two or three accurate shots to down this fella.



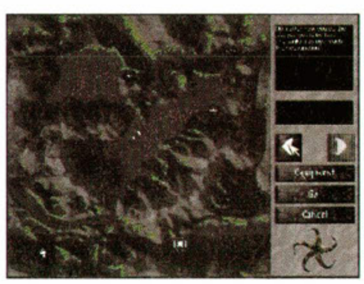
You've got a lock on an enemy tank. Although you're armed with air-to-ground missiles, you'll have to wait for visual contact before launching as they're not terribly accurate.



> **... going after the enemy yourself is great fun, mainly because the controls are so lovely.**



The small white triangle indicates that you've locked onto an enemy target. If you had a wingman on this mission you could now despatch him to deal with the threat.



PUBLISHER: Blittersoft (01908261466)
PRICE: £24.99
VERSIONS: A1200
REQUIREMENTS: 4Mb Fast, HD, CD ROM
RELEASE DATE: Out now

GRAPHICS: ●●●●○
Fast, smooth and very pleasing.

SOUND: ●●○○○
Well, they won't spoil the game for you, which is a blessing.

ADDICTION: ●●●●○
Good learning curves, it's very difficult to try just one mission.

PLAYABILITY: ●●●●○
The mouse/keyboard combination is a dream.

OVERALL VERDICT:
I'm not convinced it'll last you as long as it should, probably because you'll find it hard to put down. Now read between the lines and buy it anyway. You'll thoroughly enjoy it.

89%

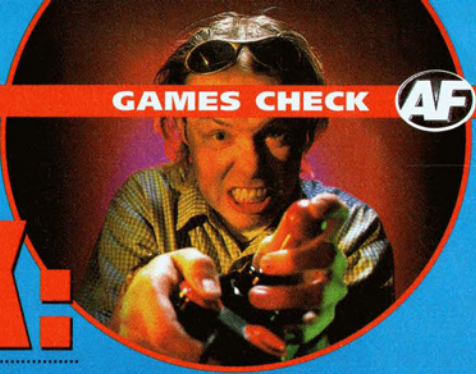


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Games Check:



Andy Smith casts his eye back over the last year and picks out the games that should now be in your library...

Tiny Troops

(AF95 88%)
WEIRD SCIENCE (0116 246 3800)
£17.99



Vulcan's fabby little *Command and Conquer*-alike is well worth seeking out. Essentially, you're controlling squads of, well, tiny troops, through some 65 missions against another bunch of equally tiny troops.

Vulcan certainly managed to keep the interest levels right up by making the missions as varied as possible, and that makes the game highly addictive. *Tiny Troops* just missed out on the Format Gold award because the controls are a little tricky at times. A game for anyone who likes a bit of strategy and puzzle solving. Triffic.

Testament

(AF99 92%)
EPIC MARKETING (01793 490988)
£19.99

This *Doom* on the Amiga clone is a corker. Not only is it one of the fastest and smoothest first-person games around but it's also one of the best designed.

From the positioning and strength of the monsters you encounter to the size of the levels you have to search in order to find the keys that allow you to exit, everything has been created with playability in mind.

Although some of the fancy stuff you might expect to find in a game like this, like side-stepping and so on, has been dropped, the action's fast and furious enough to keep you at the keyboard.



Big Red Adventure

(AF98 86%)
POWER COMPUTING (01234 851500)
£19.99





This is a fine four-part graphic adventure set in Russia. Sort of. You control a different character for each of the four parts, with different tasks for each section. The humour's good, the puzzles are logical and the game is big enough to keep you adventuring for a very long time. Not quite in the same league as *The Secret of Monkey Island* or something like that, but a damn fine adventure game all the same.

Nemac IV

(AF100 93%)
SADENESS (01263 722169)
£24.95



And coming right on the heels of *Testament* was this even better first-person blaster. Big guns, big explosions and big levels with big baddies are the order of the day here, and all those elements combined make for an excellent game.

It manages to stay firmly on the action side of things and yet very cleverly squeezes in some great puzzles too. You need a beefy set up to get the most out of *Nemac IV* (fast processor, CD-ROM drive) but it's worth upgrading your existing set-up just so you can play this game.



One of the best games of the last 12 months, so get your Amiga upgraded and get on the phone and order yourself a copy.

Uropa2

(AF105 90%)
WEIRD SCIENCE (0116 246 3800)
£29.99



Uropa2 is a mission-based action game involving combat and puzzles. Its 10 missions are split between charging around various underground bases in the guise of a droid and driving a hover vehicle across the surface of an alien moon.



The missions are large, and though there are only 10 of them, you'll find they take some time to finish. The clever combination of puzzles, tightish time limits and combat works really well. Even though the puzzles may be complex, they're never too bizarre or difficult which makes playing the game tremendous fun. It's gotta be on your shopping list.

Final Odyssey

(AF106 88%)
WEIRD SCIENCE (0116 246 3800)
£29.99





Five huge levels of maze adventuring and puzzle solving await the player in *Final Odyssey*. Initially armed with a crossbow, the idea is to charge around the game's levels throwing switches, collecting keys, shooting the baddies (of which there are many) and avoiding the traps (of which there are even more). It's excellent fun, although not quite a classic, and great value for money when you consider there's a bonus two-player game thrown in if you manage to complete the one-player game.

Well worth taking a good look at and certainly one to go for if you fancy a bit of high quality maze puzzlin' adventurin'.

onEscapee

Andy Smith is trapped on an alien world with little idea of what to do next. Unsurprisingly, this is not an unusual situation for him...



With hindsight, I now know I should have avoided this nasty 'orrible thing. Oh well, back to the last save point...



Wait here for the machine above you (top) to blast you past the fallen log and then continue.







The corpse hanging from the ceiling drops blood that hurts if it touches you (left). Getting past the monster (right) takes some careful timing – wait until it's already chomping on a bat before rolling past.

Being gobbled up by some alien monster. This is just one of the many death scenes in onEscapee, and believe you me, you're going to be seeing quite a few of 'em.

Daniel White's not had a good day. First of all the telly goes on the blink and then a couple of aliens come crashing through the door and decide to whisk him off to another planet. Harumph.

> "Constant referrals to the hint book make the game a more painting-by-numbers procedure than it needs to be."

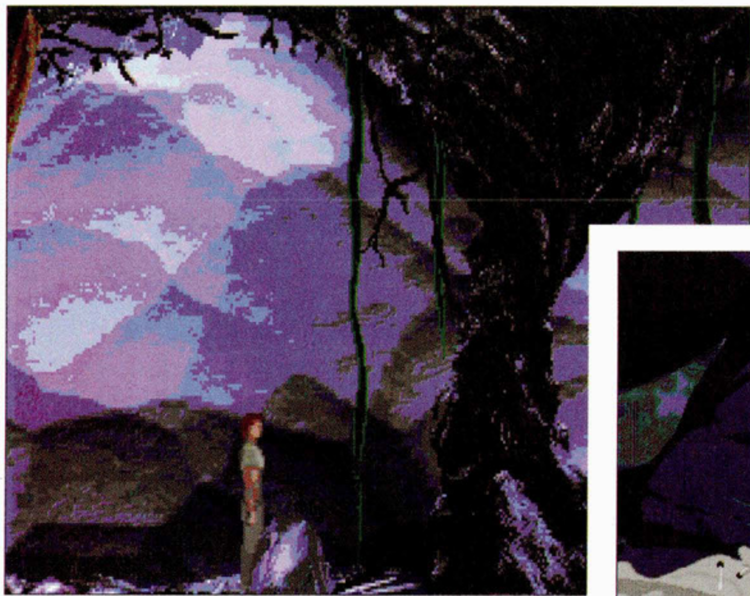
Still, Danny's a bit wily and puts up a bit of a struggle on the way to the alien planet and manages to crash-land the spaceship he's being escorted in. This spaceship's then taken off to the local junkyard where it's about to be vapourised because the locals think our Dan's shuffled off this mortal coil.

And that's the situation at the start of this graphic adventure. Waking up in the junkyard with the vapourising machine just about to turn him into a random collection of molecules, Dan has got to think and act fast in order to survive the game's seven levels.

onEscapee's very much in the *Another World* camp of graphic adventures – excellent looking, with super-smooth animation and terrific attention to detail.

The controls are simple enough with left, right, jump, roll and so on, but you might find the best way to play the game is using the keyboard because I found the joystick to be a little unresponsive at crucial times. And those times really are crucial because there are a lot of timing puzzles to get through in order to progress in *onEscapee*.

There are a lot of other puzzles too, and I'm sure some are a lot more illogical than the designers intended. For a start, on the first level, just a


Underground and there's no obvious way forward. Now's the time to try just about anything that springs to mind.

> ...the best way to play the game is **using the keyboard** because I found the controls a little unresponsive...


Getting hold of the gun here is not as simple as you'd expect but it's a very handy piece of kit to have on you. Even if it is covered in slime.


Miss getting the gun, though, and you're going to be seeing this huge spider rear up and have you for lunch. Not a nice way to go.

few seconds into the game you'll realise that you can't get past a fallen log surrounded by an electric fence, so what do you have to do? Wait for the vapourising machine to come along, hover over you and blast you under the log. Hmm.

Once you're past the log you get to run past the crashed spaceship that carried you to the planet and arrive at the top of a cliff. There's no way down and that vapourising machine's getting closer all the time. What does Dan have to do? Actually run back to the spaceship and crouch behind it and wait to get blasted off the screen again before running back and jumping down the hole where the spaceship used to be.

Maybe it's because the designers put such an illogical puzzle in front of the player right at the start of the game that *onEscapee* comes across as a game that was designed by the programmers with little or no playtesting from outside. There is a hint book included on the CD and you'll find yourself coming back to it again and again, until you get to the point where you can no longer understand the translation and so you'll get stuck anyway.

It's annoying and it's a shame because this could have been a whole load more fun. Experienced adventure players will begin to see the puzzle solutions after a while, but if you're not a lateral thinker you're going to find the game very frustrating indeed. Constant referrals to the hint book make the game a more painting-by-numbers procedure than it needs to be.

Time and time again you'll die trying to get past a certain obstacle and time and time again you'll fail.

Thankfully, and possibly *onEscapee*'s biggest saving grace (er, quite literally, folks), is the player's ability to save the game wherever he feels like it, and the game's rather clever feature that re-starts the game from the last save position. This does make the frustration of not being able to get past a certain point a little more bearable but it still doesn't eradicate it completely.

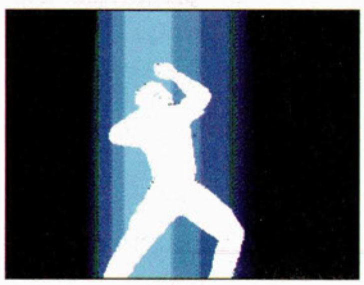
The look of the game and the fabulous soundtrack can't be faulted. There's a song that plays throughout the intro which is rather excellent, and there are even going to be free drivers available for graphics cards should you own one. Neither of these make up for the basic flaws in the game design itself, though.

No player minds the odd timing puzzle here and there as long as they're fair, because then all it requires is a bit of patience and a button press at the right time.

Gamers don't even mind wacky solutions to wacky puzzles every now and again, as long as there was actually some way of figuring out what you should have been doing.

What gamers don't like and what makes onEscapee rather disappointing are puzzles that you'd never ever think your head around and there are just a few too many of those in this game.

This really is a let-down, especially because so much effort has been put into the graphics and the sound. Ho hum.


Another death scene, this time because you tarried too long in the junkyard.

PUBLISHER: Sadeness (01263 722169)
PRICE: £29.95
VERSIONS: AGA Amiga, GFXcard version to follow
REQUIREMENTS: 4Mb, HD, CD-ROM
RELEASE DATE: Out now

GRAPHICS: ●●●●○
Mainly excellent, sometimes really stunning.

SOUND: ●●●●○
Some of the best music heard in a game for a long, long time. Splendid.

ADDICTION: ●●●○○
The frustration level's high so you'll be tearing your hair out sooner than you should.

PLAYABILITY: ●●○○○
The controls are easy but doing the right move at the right time can be very tricky.

OVERALL VERDICT:
Looks great, more suited to the experienced adventurer than the novice. More thought could've made it more accessible, though.

72%

Sword





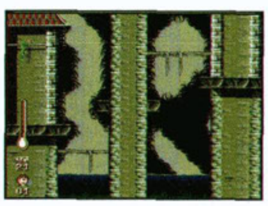
Every time you get hit by something you become dazed and confused, before being sent back to the start.

Classic platform action comes back to the Amiga. Andy Smith doesn't find it very hard to contain his excitement.

To be sung in to the tune of The Beautiful South's *'Rotterdam'*: "This could be *Robocod* or *Soccer Kid*, *Lost Vikings* or *Zool*, 'cos *Sword* here is anything, anything at all..." Alright so the scanning's crap but you get the point. Sword's a platform game like a thousand other platform games.

Armed with a machine gun, our hero has to negotiate seven levels of typical platform action, jumping from pillar to post and falling to his death if he puts a pixel wrong. The machine gun's there to deal with the various baddies our hero encounters along the way – anything from dragons to ants – but over zealous use of (in Sergeant Major's voice now) the machine gun, destroying baddies for the purpose of, (back to normal) *causes it to overheat and jam.*

Let go of the fire button for a few seconds and, when the *temperature gauge on the left of the* screen has dropped, you can resume firing again.



Cunningly, our hero hides himself behind a pillar. It would be handy if there were any monsters around...

"The game is very fond of suddenly presenting you with a trap you had no idea was there until you walked into it."

There's fruit to collect along the way for extra points, along with various stuffed toys and slices of cake and so on, and keys which allow access to other parts of the level.

Make it to the end of the level and it's time to fight one of the bosses. Victory here means you get a rather lovely password so you don't have to attempt the level again.

You'll be extremely pleased about this because, time after time, you'll be killed by the slightest touch from some baddie or hidden trap.

The game is very fond of suddenly presenting you with a trap you had no idea was there until you walked into it, so you have to go right back to the start of the level. Harumph.

Sword is all about remembering where these traps are and how to jump *from one platform to* another. This doesn't make the game bad, but there's *nothing in Sword that* hasn't been done before and indeed, many games have done *it a lot better before.*

I really don't want to be too down on *Sword* though. People who actually love this level of frustration should get a great deal of enjoyment from it. Personally, I think gameplay's moved on a great deal and simply re-hashing old ideas, without even adding new features and twists, does very little to inspire me.

There you are then. A very average platform game with a high level of frustration. If that doesn't bother you too much then you might find it fun and you might even find it addictive. I didn't and so I wouldn't recommend it to you. And now, time for a song...



These spikes are impossible to see until they pop up as you're going over 'em. GRRRRRRR!

PUBLISHER: Titan Computer (0049 421 481620)
PRICE: £14.99
VERSIONS: All Amigas
REQUIREMENTS: 1Mb
RELEASE DATE: Out now

GRAPHICS: ●●●○○
Big and cartoony but uninspired. It's smooth I suppose. I'm struggling here...

SOUND: ●●○○○
Not impressive. The jaunty in-game tune will have you reaching for the earplugs.

ADDICTION: ●●○○○
Get killed and there's a twinge of desire to get further. Not much of a twinge though.

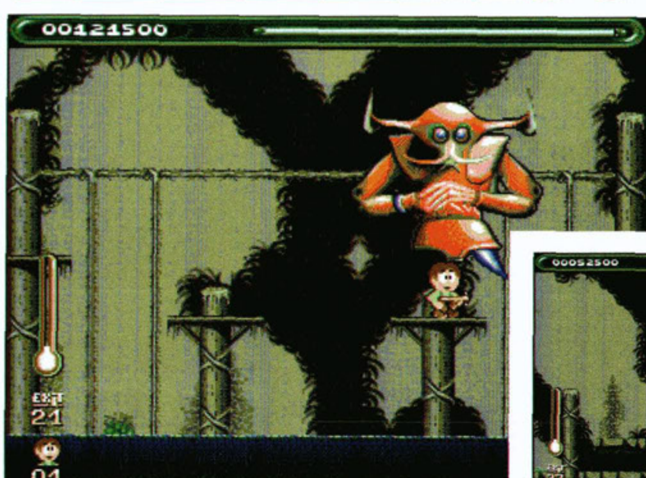
PLAYABILITY: ●●●○○
The pixel-perfect jumping drives you nuts. Re-start so far back is a nightmare too.

OVERALL VERDICT:
One for fans who like their games with lots of frustration. It's not bad, just not very special.

60%



Collect the key and come here to open the door to the rest of the level. You know the drill (above).



The game's first end-of-level boss. Altogether now: "Behind you!"



A screen totally devoid of things to collect. Except for that key (left).

A brand new work in progress! James Geraldi introduces H-Bomb.

H-Bomb

WORK IN PROGRESS

So you have an A3000 with an '030, video card, loads of RAM and you want to play the latest Amiga game... but you can't because it's AGA only! Or you have an A4000 with an '040 and you have to boot with no caches and offer a ritual sacrifice just to get the game to play. Sound familiar?

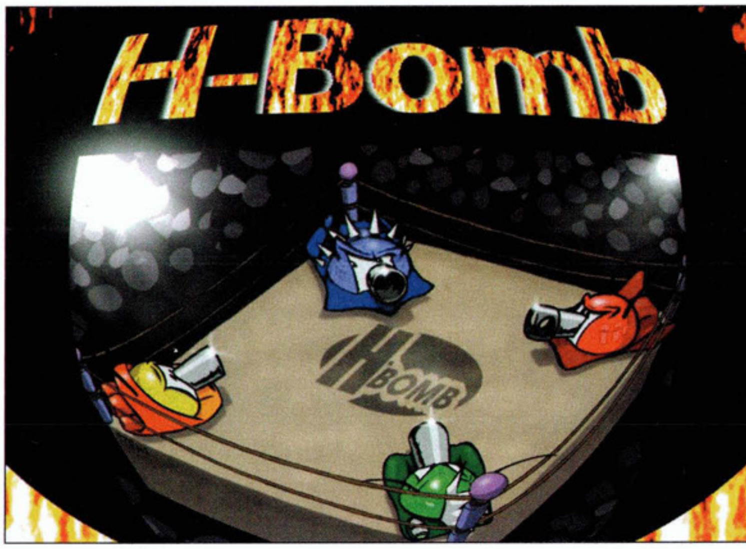
We are Aurora Works Inc., an Amiga-based game company in Canada dedicated to supporting high-end Amigas. Despite obvious financial repercussions, we will release AGA versions only when performance and design minimums are met. We do not want old technology to hurt future developments as OCS/ECS did when AGA was released. AGA is 7 years old and in the absence of chipset development, RTG has become the way forward for the Amiga.

Our current game project, *H-Bomb*, requires a CD-ROM drive, '030/25+, OS 3.0+, 4Mb RAM and either a CyberGraphX or Picasso96 RTG graphic card. AGA support was cancelled after it failed QA due to chip RAM limitations and low performance in 640x480, 8-bit mode.

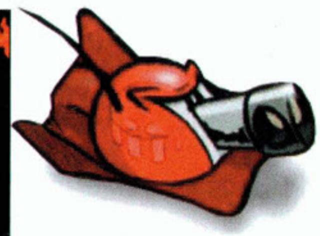
Like *DynaBlaster, H-Bomb* is based on a concept where players move frantically around a maze, dropping bombs to try to blow up their opponents. Of course, up to three other people have the same idea!

We have modernised the game concept while keeping the same frenzied competition. Simple to pick up and play but varied enough to allow for strategies and skills, *H-Bomb* caters for all ages, from 5 year olds to the 40+ crowd.

So why *H-Bomb*? It's an excellent game format, but there are few choices on the Amiga and none provide a wide range of remote player options such as TCP/IP or modem connections. Also, it's vital for a new company not to tackle a game design that is too vast, requiring too many resources to complete the project. It is better to choose a game design that can be achieved without compromises and within your means and then progress with each subsequent title.



A game that focuses on gameplay and multiple players in a multi-tasking and system friendly manner, H-Bomb offers Bomberman-style action for gamers of all ages.



Aurora Works are aiming to cater for high-end Amigas with their first release, H-Bomb

Remember that iD Software did not start with *Doom*!

H-Bomb is our way of saying hello to the Amiga community and showing that we are committed to quality games that use only the best hardware and software technologies.

When you buy an Aurora Works title you'll find that everything from the packaging to the opening animations, game screens and gameplay is just as professional as similar titles on other platforms.

When we started, the three main Aurora team members, Jim Harrison, Tim Konkle and myself had PC development backgrounds with only Jim having had extensive experience in Amiga programming.

We chose the Amiga as we knew it was a close-knit community where we would get feedback, energy and ideas. We were feeling frustrated working in the Win95 environment too, and didn't like the effect MS was having on software development.

Although the AmigaOS lacks a game API and has few functions to help game programmers, it's a small and responsive system.

> **H-Bomb is our way of saying hello to the Amiga community and showing that we are committed to quality games...**

The tools we needed that were not in the OS had to be developed over a seven month period, but we could see that an Amiga with modern equipment could once again be a great games platform. There are many people with sound cards, video cards and CD-ROM drives but few games that take advantage of these upgrades. We want to support this part of the Amiga community.

Performance is as important to game programmers as it is to gamers. *Bomberman* for Win95 recommends having a Pentium 133 with 32Mb of RAM – if that is what 'hot Windows technologies' offer, then there's room for an alternative that doesn't waste RAM and steal CPU power.

For the next few issues we will look at some of the problems we have faced and are facing, as well as the few (very few) things that we did right first time!

More details...

Aurora WORKS

Aurora Works Inc. are taking pre-orders for H-Bomb at US$34 plus shipping, but have no UK distribution date set as yet.

If you want to get in contact with Aurora Works, you can visit their website at: http://www.auroraworks.com or write to them at: Aurora Works Inc. 358-114 Queen Mary Road Kingston, Ontario K7M 7E8 Canada.

There used to be this old TV ad of a little girl giving someone a home-made card and saying proudly "I didn't buy it". These are the Amiga games' equivalent of that card. Andy Smith checks out what are, of course, the...

Reader Games

ON THIS MONTH'S CD

AFCD23:-ReaderStuff-/-ReaderGames-

And most of them are as obviously home-made by one person as that little girl's card. Not that we mind here, we love 'em just as much as if they'd been coded by a group of 20 professionals.

Reader Games is all about encouraging talent. The Amiga games scene may not be as commercially vibrant as it once was, but on the amateur stage there are just as many young coders keen to show that they can create a good game as there ever were.

So we give them a chance to show the world what they can do and offer some help and advice along the way. We don't attempt to pull a game to pieces here – we're not that bothered that the game may have some ropey graphics as long as it's got some solid gameplay.

Gentle steering and the benefit from our years as professional games reviewers is what the Reader Games section is all about.

If you've always had a hankering to create a game then there's no better time to sit down and get those keys humming.

Every month we not only pick a number of games to show our readers (and if you've got a CD ROM you can play them too) but we award a rather lovely £50 to the author of the month's best game.

Nick informs us that this equates to some 25 pints of Guinness, but you can spend it on whatever you fancy really, so it's well worth having a pop isn't it?

So while you're thinking about how to create a *Civ* beater, have a read through this month's selection of games and see if you become inspired yourself...

GAME: Dark Conquest AUTHOR: Chris Blunt LANGUAGE: Amos Pro



£50 AF Winner!

Chris is a first-timer here at Reader Games which is always nice to see, and his first effort is well worthy of inclusion.

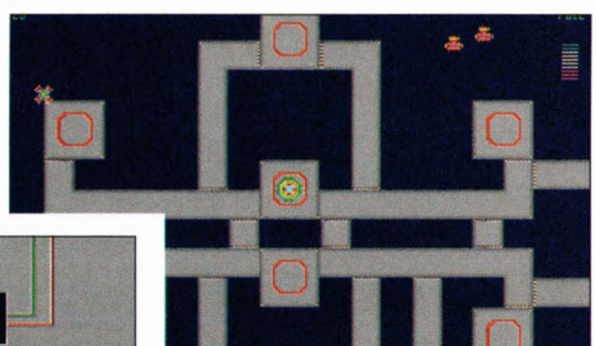
Dark Conquest is a viewed-from-above shoot-em-up with a couple of fundamental game design twists. For a start the game's actually mission based. This translates to being a fancy way of breaking the game down into levels but it works nicely.

Fly your spaceship over some large structure (there's a whole load of scenario stuff telling you the importance of this but it's not terribly important for our purposes) and destroy the small alien craft that are flying around. Every alien killed earns the player a small amount of credits and Chris has cleverly made this an important feature of the game.

Fuel and shields have to be bought (hitting Return takes you to the shop) for the player to continue, and upgrades can be bought and bolted onto the player's ship.

As some of the missions are time-based it becomes very important to choose the right kind of upgrades to buy. For example, a better, faster engine for your ship is essential when you've only got 10 minutes or so to complete a mission, whereas a better laser cannon might be best left until later.





Flying around shooting alien invaders (top and right) and then buying some goodies in the shop (below) in the splendid Dark Conquest.



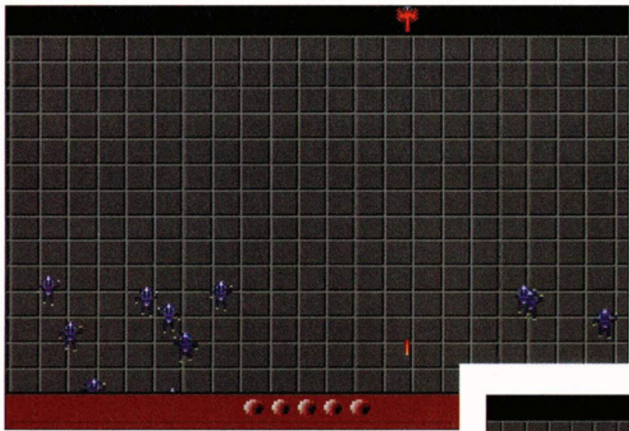
Dark Conquest doesn't look brilliant and it doesn't sound brilliant, but there's a solid kernel at the centre of the gameplay and that's what we like to see.

It's not a hugely complicated game but Chris has obviously thought hard about how to make the most of the features the game has and should therefore be applauded for his efforts. More of the same please.

VERDICT:

A fine, solid game that's more fun than your average shoot-em-up because it's been put together so well. Rope in a mate with erm, slightly more artistic flair (don't be offended Chris) and this would be a winner.

GAME: The Wall AUTHOR: Ermannd Manzoni LANGUAGE: Unknown



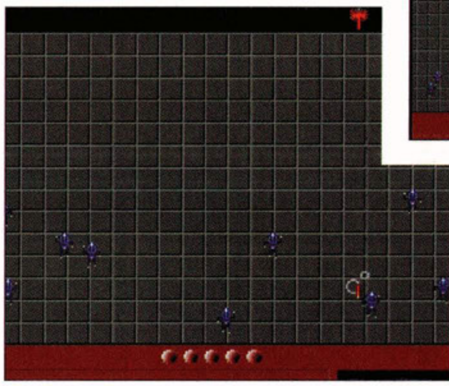
"Little blue men, Sir. Thousands of 'em!" And what's more they just keep on a-coming. This is The Wall and it's more fun than it looks. No, really.

Ermannd is no stranger to Reader Games but his previous couple of games have ranged from the quite good to the doesn't work. Thankfully, *The Wall* not only works but is back in the quite good camp.

Imagine a sort of *Space Invaders* game where your turret is at the top of the screen and where the Invaders are coming from the bottom of the screen, and you'll have a pretty good idea of what's going on.

Instead of the invaders moving across the screen they climb 'the wall' in straight lines. This makes them sitting, well climbing, ducks because all you have to do is line up your turret and let fly with the shots. Handily, should a couple of men be in-line with each other and the incoming shot, then you're gonna take them both out.

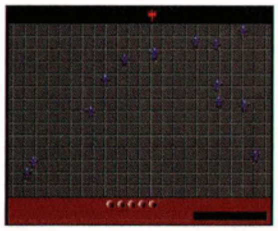
Play continues in this fashion until a little chap makes it to the top of the wall. Simple.



Just about the only thing muddying the water is the fact that the little chaps gradually get faster. Ermannd has tackled this well because the increase in speed is very gradual but still noticeable enough for you to start to panic when you can see them getting nearer to the top than you'd like.

A bit of variation is just about the only thing seriously missing from *The Wall*. A couple of bonuses here and there or some different weapons, or even some different climbers, would have been nice.

Although *The Wall* becomes tense when things start to speed up, it's still a little on the tedious side. AF



Repel the hordes of little fellas in this excellent, upside-down, Space Invaders-type game.

VERDICT:

Fine for a few minutes but the lack of variety kills off the enthusiasm. Very tense and panic-inducing when things start to speed up though!

GAME: Amigotchi II AUTHOR: Samuel Brookes LANGUAGE: Blitz Basic



Hurrah! Just a couple of months ago (*AF105*) I was very excited to get *Amigotchi* from Samuel Brookes, only to be severely disappointed when it transpired that the little fella did absolutely, erm, nothing.

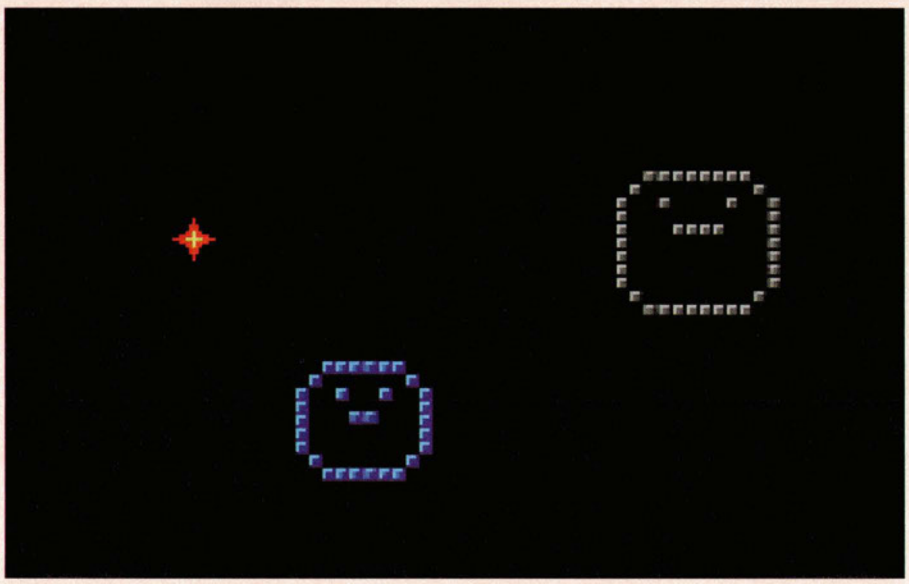
Imagine my delight then to discover *Amigotchi II* in the post. Imagine my disappointment to discover that the little fella still does almost nothing.

He falls asleep and, bizarrely, wakes up again immediately, but that's about it. He can still be fed, still be watered and at least Samuel's fixed the 'disappearing Amigotchi' bug which meant that if you moved the info window at the bottom of the screen over the wee chap he disappeared (you can't move the info window any more).

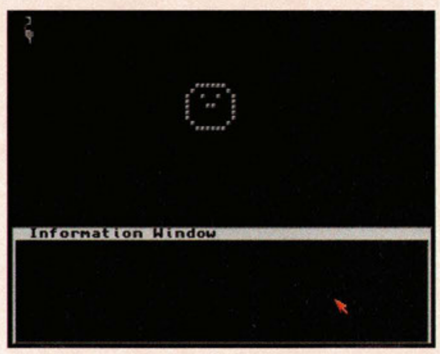
Samuel's also included a rather strange game-within-a-game called *PC Gotchi*. Here you move your Amigotchi up and down the screen (very, very slowly) in an attempt to shoot a blue Amigotchi that moves across the screen at random heights. Even when you're not playing *PC Gotchi* you've now got the chance to move your creature around the screen (using a joystick).

And that's as exciting as *Amigotchi II* gets. There's still almost nothing to do with the little git and consequently you'll tire of looking at the screen after five minutes. I'm still waiting for someone to produce a Tamagotchi game on the Amiga and it looks like I'm going to have to wait even longer.

Samuel's threatened to send *Amigotchi III* in the next couple of months, but frankly Sam, unless it does something er, significant, I really wouldn't bother. AF



And this will be the rather thrilling game within a game, PC Gotchi then. I lied about the thrilling bit actually, because it isn't.



Once you've moved your Amigotchi into the middle of the screen, given it a couple of meals and a couple of drinks, turn your Amiga off and go and watch the telly or something. It's far more interesting.

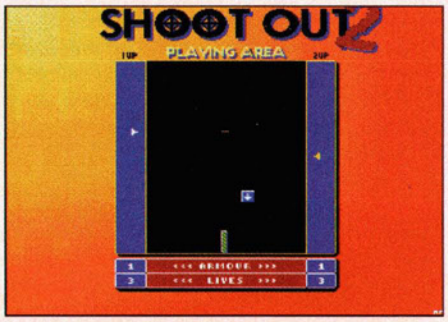
VERDICT:

A Tamagotchi on the Amiga game that still doesn't do anything. How much fun can you have pressing the 1 key to give it a meal? If you last longer than half an hour then you're a better person than me.

GAME: Shoot Out 2 AUTHOR: Gareth Griffiths LANGUAGE: Amos

Another long-standing friend of Reader Games is Shrewsbury-based Gareth Griffiths here. As you've guessed from the title, *Shoot Out 2* is an improved version of his *Shoot Out* game that featured in these pages a while back (*AF103*). Although that game was fine, it was obvious that it could have been improved and I ventured a couple of suggestions myself: "...maybe armour should be included so you could collect bonus armour too." Gareth, it seems, was already on the case and so *Shoot Out 2* features armour bonuses amongst others.

It's a simple enough game. Two players each control a small tank thing that moves vertically up and down the side of a small arena and attempt to shoot each other. Now though, there are bonus icons that appear in the middle of the arena that the players can shoot to collect. The bonuses have various effects, including beefing up the tank's armour to make it able to withstand more hits. There's now a block in the middle of the arena that the players can use to hide behind, but this can be tricky because it's constantly moving.



Shoot Out 2. A fine example of how just a couple of tweaks and additions can make a load of difference. Shame there's no one-player mode.

The fact that the game's only two-player is the only disappointment here. Gareth explains that he's aware of this but can't get a decent computer-controlled player using Amos, so two-player it's going to have to be.

Possibly the only other thing I'd change is having the bonuses stay on-screen for slightly longer than they are at present. That aside,



this is fun. Simple but fun. You won't be playing it for hours, but find a friend and you'll both have a good laugh.

VERDICT:

The addition of the bonuses add a lot to the game. All it lacks is a decent one-player mode. Fun for a short while but not a game to keep you playing for days.

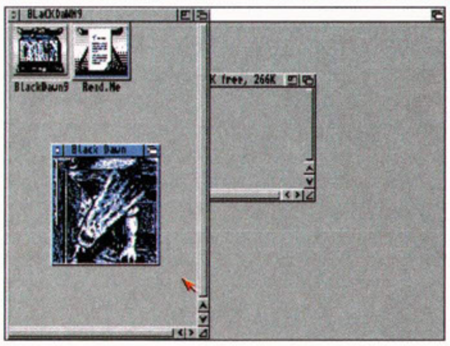
GAME: Black Dawn AUTHOR: Shaun Watters LANGUAGE: Blitz Basic



Now then, here's a curious game. Boot it up and you're presented with a small window with some black and white graphics showing you, in first person perspective, looking at some sort of dungeon arena. Several layers of clouds parallax scroll in the sky and you can move around using the cursor keys. Every now and again you'll find a monster that needs shooting (Return key) and apparently the idea's to find the exit.

I say apparently because after a couple of frustrating hours I still seem to be in the same part of the dungeon. Turn a couple of times (*Black Dawn* uses the 'flick-screen' method of moving, just like *Dungeon Master* and similar games), until you see some space in front of you. Move forward and then try turning. Curiously you won't be able to because you're now in some sort of corridor. Bizarre. I hope I'm not doing Shaun a big disservice here but I just can seem to figure out how I'm supposed to orientate myself around the place. No matter where I go, the game seems to shift the goalposts at will. Seemingly open spaces, erm, aren't. Even the monsters seem to be governed by something other that the laws of physics. They quite regularly come and have at pop at you from behind and you won't be able to turn around and fire back at them because there's actually a wall behind you.

Sorry Shaun, I just can't make head nor tail of this.





This really should have been a whole lot better. Try it at home and see what you think.

VERDICT:

It's fast and it looks like this could have been quite entertaining but I just couldn't seem to play it properly. Please let me know if I'm missing something fundamental here folks.

GAME: Cyber Pet AUTHOR: Shaun Watters LANGUAGE: Blitz Basic

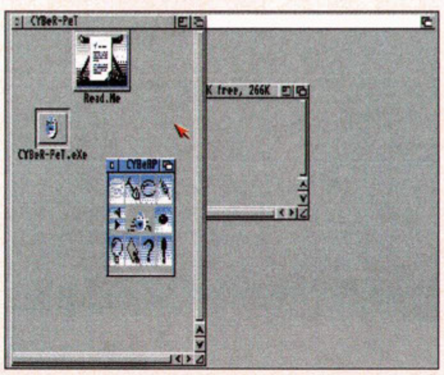
Shaun's second game this month is included because, well, it demonstrates the need for instructions when you're sending a game in.

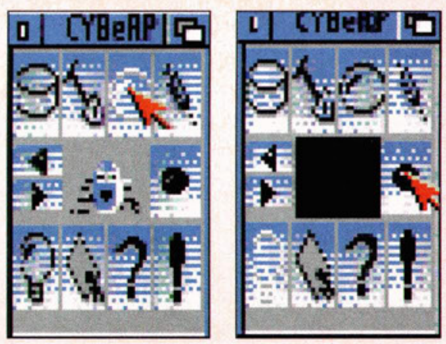
All I'm after here is a brief description of how to play a game. You know the kind of thing – which keys do what? What do the various icons mean? Anything at all would help because after a half-hour of random button pressing I still couldn't manage to do anything with *Cyber Pet*.

I sussed that the arrow icon to the left of my pet moves the icon highlighter and that the button to the right of my pet sometimes makes the little window in the middle go black but that's as far as I've managed to get.

This is a shame because Shaun's obviously got some talent and knows how to code. *Black Dawn* and *Cyber Pet* are both testament to that, but he manages to shoot himself in both feet, firstly because *Black Dawn* seems to play by its own rules and secondly because *Cyber Pet* is unfathomable without some insider knowledge.

This is a lesson for everyone thinking about sending a game into Reader Games – if you're going to do it, then at least make my life a bit easier by telling me how to actually play the damn thing!





Well, the little chap certainly seems happy enough (left). I wonder if he'd like me to turn the lights off for him (right)?

VERDICT:

If I knew how to actually do anything it would be a whole load more fun. Give it a bash and let me know what I should have been doing.

GAME: Missile Command AUTHOR: Timothy Hanson LANGUAGE: Unknown

Oh joy! *Missile Command* clones are often featured in these pages but every now and again one comes along that just manages to be a little bit special. This is one of them, just because it's so lovely to play.

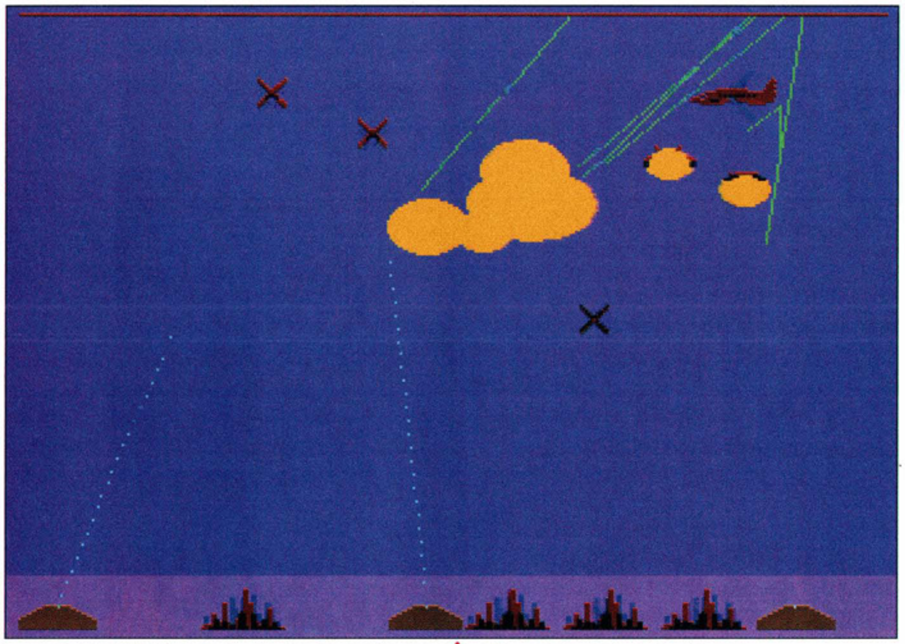
Unusually, you're given a big X to control the targeting of your missiles which come from three piles at the base of the screen.

Every time you press a mouse button an X is left on the screen indicating where your missile is going to explode. Every missile fired leaves a dotted line trail as it makes its way towards its destination.

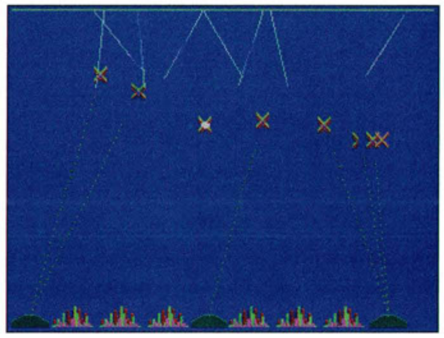
It's a fine clone. Everything's there that you'd reasonably expect. There are planes flying across the screen dropping more missiles, satellites making an appearance and so on and the speed increases after each wave of missiles are well judged.

My only concern with the game is the dreadful choice of colours used for the background graphics. Some are so bad it's almost impossible to see the missiles coming! The sound's pretty ropey too but then you can always turn that off.

If the only thing downsides are the poor colour choices and dodgy sonics then there's not too much to worry about is there?



I reckon the dotted trails the missiles leave are fab – I just wish the missiles would travel that wee bit faster, though.



That's that lot taken out then. At least the colours chosen for this wave aren't too gaudy – you should see some of them!

VERDICT:

Nice one Tim, and I didn't even say MMMMBOP once. Doh! But seriously, it's not an original game at all but it's still great fun to play.

READER GAMES

READERS FAVOURITE!

Hurrah! We have a winner! Despite the high quality of most of our Reader Games, Steve Eaborn's *Compendium* romped home as your favourite. Steve will be receiving a whopping £100 and an exclusive bag of goodies, stuffed full of things which are currently lying around our office, getting under our feet and presenting a serious fire hazard. So get writing your own games now! The next winner could be you…

Compendium Steve Eaborn Issue 103







Steve Eaborn's Compendium deserves all the praise it gets because every one of the games was a superb version of the arcade original. If you missed this one then you missed out. Rush to the back issues page and get your copy of AF103 ordered today – they won't last long!

READER WARRANT

When you're sending in your submissions make sure you also give us:

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2. Details of the language used to create the game.

3. A recent photo of yourself.

The address to send your stuff into is:

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Everything included on the *AFCD* must have a reader warrant with it. Just cut it out off this page, sign it and send it in to us with your game and a recent photograph of yourself. A last reminder: if you don't include this warrant we simply won't be able to put your game on the CD – and that means you won't be able to have it judged by other readers.

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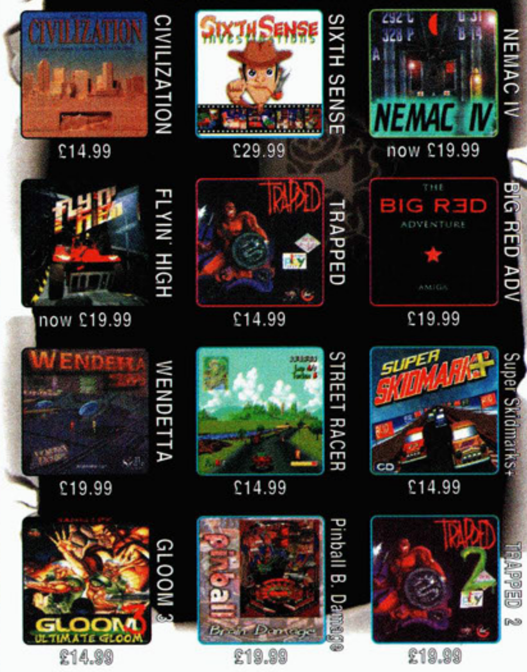
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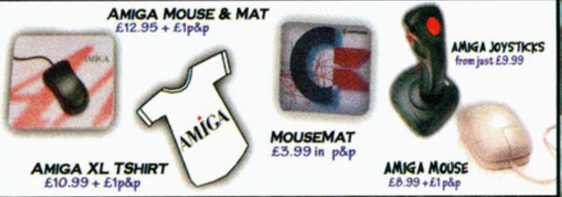
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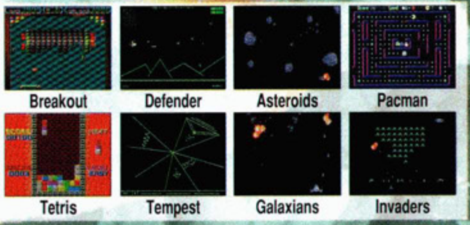
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GameBusters

After last month's Helping Hands special, Andy Smith fancies himself as something of a tips crusader, hence his insistence on bringing you even more hints, cheats and complete solutions to help you through your games. Poor deluded lad...

Cannon Fodder





This classic game has been coming out of the cupboards and enjoying a new lease of life with some of you, especially a Mr Palmer of Cheadle, so here are some handy tips to get you safely through some of the tougher missions.

Mission Eight.
Phase Two

Shoot the rocket launcher, hide behind the ruined huts, send one guy to grenade and then rocket the launchers across the water. Once they are dead, send two or three chaps over to the far side of the water.

Walk the remaining soldier up to the palm tree and barrel where the two rocket launchers will self-destruct. By moving fast, you can shoot the remaining two, so pull him back and leave him to defend himself.

> **You've now probably only got about fifteen seconds to blow up all the doors and kill the remaining soldiers...**

Using the other three chaps, charge the next bunker, shoot the first launcher then go round to the front and grenade the second. Head round the back of the next bunker and take out the final one. Make sure everyone within range has been gunned down before crossing the water.

Clear a path to the turret and, once inside, fire at as many bunkers as you can. Aim too close and you're in danger of blowing yourself up, so be very careful.

Mission Eight.
Phase Four

Shoot the soldier coming out of the tunnel. Grenade the hut over the



War has, indeed, never been so much fun, as the jaunty little intro song goes to this highly popular game. And if you've been having trouble with some of the tougher missions, then it's a good job we're here!



trees and blow up the jeep. Retrieve your wheels, bomb the hut and send one chap to take out the three launchers. The third one's going to need a rocket. If you put all four chaps in the jeep, only two or three will ever make it so leave one on the cliff-top to provide cover and then jump the jeep into the water.

Make sure that everyone in the jeep is formed into the one unit so they can all get out at the same time when the jeep sinks.

Head straight to the far side and grenade both the hut and the launcher over the trees. Run straight past the turret and keep moving until you reach the far side. Shoot the remaining launcher, cross over, head down the bank, grenade the jeep, and then man the turret and blow up the bunkers.

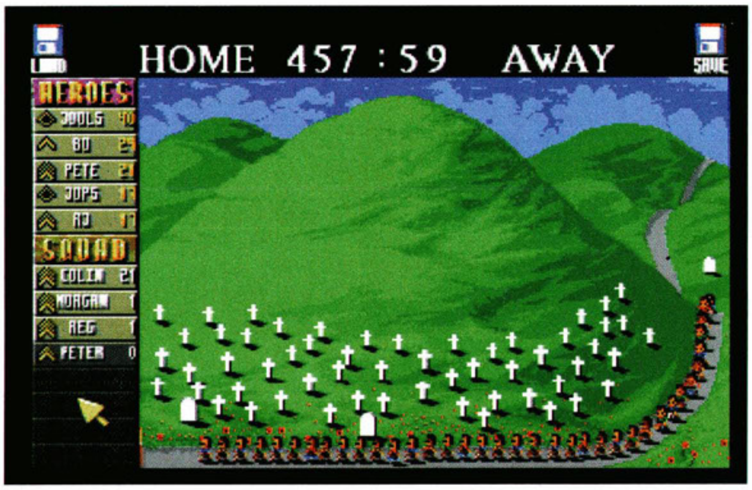
MIssion Twelve.
Phase Four

There are two snowmen in the top right hand corner and if you walk up to, and stand next to, the fat one you should become invincible for the rest of the phase. Very handy indeed.

Mission Twelve.
Phase Six

It is possible to complete this level without using the chopper or pressure pads and with only one man.

Head east towards the first bunker and destroy the gun on top. Now go southeast, destroy the enemy chopper before it takes off and head



As you lose more and more recruits, the hillside becomes steadily more populated with headstones. Avoid this happening by following our handy tips.

anticlockwise, remembering to take out the enemy guns.

Run to your own gun on top of the factory and take out the factory door. Make sure that the man you send is carrying all the rockets.You should get through before you even have the chance to wonder how you ever had so much trouble with this level in the past!





Mission Nineteen.
Phase One

You need three men to finish this mission, so if any get killed it's best to press ESC and try again. Now then, head straight up to the building at the top and position the troops to the right side. Split off two men and head right to the pile of junk where you'll come under fire from a jeep.

The idea is to run towards the junk, lob a grenade over to the other side and then scoot off quickly, otherwise the jeep either shoots you or jumps over the junk and completely flattens you.

> **"The idea is to run towards the junk, lob a grenade over to the other side and then scoot off quickly..."**

Head these two guys down to the wall and avoid the grenades raining down from the chopper. After a bit, it'll get fed up of trying to kill you and head down to where it'll land.

Hug the right side of the screen to avoid the turret and then rocket the chopper. Then go back to the wall, stand on the white pad, and go to the building in the middle. Once

continued overleaf ➡



Two of our intrepid boys take out a rather dangerous-looking hut. They should have coated it in Ronseal Anti-Rocket lacquer. It does exactly what it says on the tin.



Flag it down and commandeer it. Fortunately, it's already been camouflaged up, so it's ready to use. That chap by the bush isn't going to have much need of it, though.

Helping Hands

PREMIER MANAGER 3



Cheat your way to extra fitness, morale and money – and don't say we don't do anything for you.

Dear AF,

Please could you give me some cheats for Premier Manager 3?

Mark Lovell, Sandford.



If only this worked in real life, eh? Bristol Rovers would be in Europe by now. Oh well, maybe next year…

I gave these out a couple of month's ago Mark, but here they are again just for you – Dial 400040 and your players will have a higher fitness rate and better morale. Dial 343343 for extra money.

MONKEY ISLAND

Dear Amiga Format,

I know you're probably sick of Monkey Island requests but I'm stuck at the giant monkey head. I can get inside but I don't know how to get the navigator head from the natives.

John Strand, Glasgow.

I certainly am fed up with these John as it wasn't that long ago we re-ran the complete solution! Anyway, here's what you need to do.

Talk to the cannibals until 'Head' comes up in conversation and then give them the leaflet and in return you should get the head of the navigator and the necklace.





Now people, people, people. Please can we all just give up with *Monkey Island* now please?

again, you'll have to avoid fire from the turrets but when you stand on the final pad it'll glow red and the helicopter will fly over.

Get in and kill everyone – just keep firing. Keep moving and cover all the doors until you get to the turret and make sure you don't blow yourself up by firing too close.

Mission Twenty Four.

Phase One

Put one man in the tank and then take out all eight turrets. Remember to keep moving. Killing the dossers is optional on this level.

Phase Two

Although there are three helicopters, only one has rockets, so assuming you survive the initial firefight you simply have to walk up to it. Watch your back, however, and throw grenades over the walls to take out any opposition before you meet face to face. Then blow everything up.

Phase Three

Put one man in the chopper, but keep all the grenades with the rest of the team. Send the team as far forward as you can, then take the chopper up the screen.

The mines detonate as soon as you fly over them, and, if you're lucky, one of the enemy will lob a grenade at you and blast one or maybe both of the doors off.

Otherwise, bring up the team and grenade the doors from the rocky outcrop. Now finish off any survivors by simply landing on 'em.

Phase Four

Run up to the top corner and put one man in the chopper. The idea is to take out the four turrets in one pass. If you fail, they'll launch homing missiles that will plague you for the rest of the phase.

Assuming you've got a couple of these blighters on your tail, then the always helpful hint of 'keep moving' becomes more applicable than ever, so blast the computer until the dome's destroyed, all the doors, consoles and pretty much everything in graceful, but deadly, fly-bys.

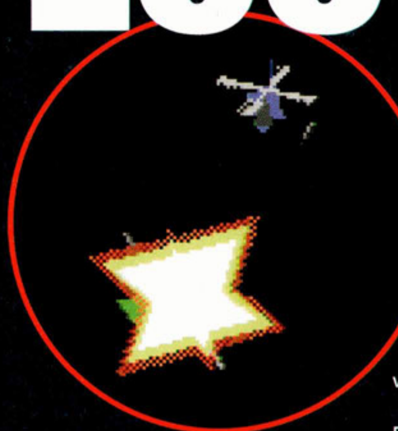
The enemy helicopters land in the corners, so why not drop by occasionally to see if they've landed.

Phase Five

Whereas the homing missiles were a bit of a drag in the last phase, they're a complete nightmare in this one. If at any point your chopper should pick one up on its tail, then hit ESC and try again.

In the meantime, cross the water, send one man to get the jeep and then race past the two turrets and

Zeewolf 2: Wild Justice



In all the time I've been back on *Amiga Format* I've never given you an in-depth guide to the Amiga's best-ever helicopter combat action game. This is bizarre when you consider I helped design it! And yes, it is brilliant. Here is the definitive guide to playing it.

Every $250,000 earned in *Zeewolf 2* is rewarded with an extra life. These are only of use in continuous play, but for tackling the trickier levels a few extra lives never go amiss, so here's how you can rack them up.

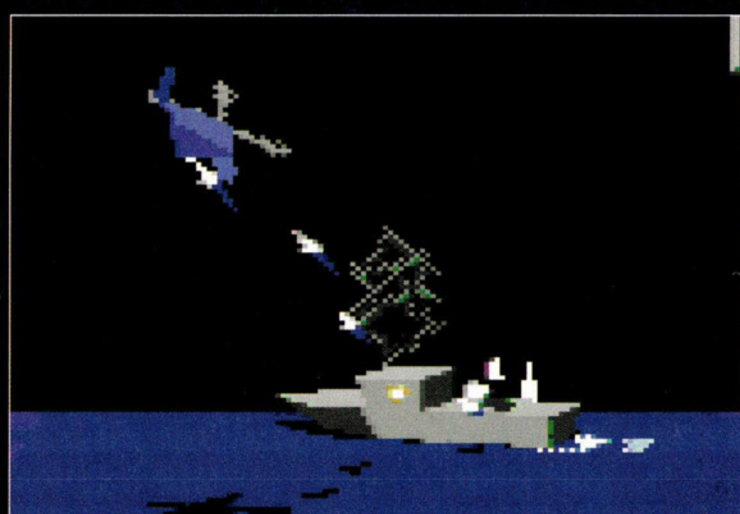
Always re-arm with rockets and missiles before completing a mission as these count towards your Unused Weapons Bonus. The best way to go about this is to fulfil all but one of your mission's objectives and then go and empty every Camel on the level, before tackling last phase of the mission. You will then finish that mission with as close to maximum ordinance as it is possible to get.

Cannon rounds don't count as part of your Unused Weapons Bonus so destroy whatever you can using the cannon.

On most levels that are spare POW's wandering around who can be picked up to refresh your armour. Even if you don't need to replace your armour, still pick up the POW's because you get a $5,000 bonus for each one rescued.

Talking of rescuing, there are often more men available to be picked up than the mission requires, and any spare men rescued earn you a Humanitarian Bonus.

Don't leave the rescue of extra men until the last part of your mission. The level will only be completed when the required man



The Zeewolf ploughs some rockets into a Shark patrol boat. Watch as it lists to one side before exploding. Very satisfying indeed, as it happens.

jump into the chopper. Blast the turrets, then sneak down the screen until you can just see the next turret.

Fire off some shots and then back off. You need to do this for every turret, but each time you back off you can take the door or any survivors. Once you've taken out the remaining four turrets, paste the area with rockets and then pick up the leader. You can't miss him because he's the one with the flashing red light on his head.

Fly the leader back to the tent to finish off the level.

Phase Six

This is the last of the game and so to mark it as something special, there's no map and only a TIME TO DIE counter. You've got around four minutes to finish this, otherwise bombs go off everywhere and you're gonna die. To best use the time, you've got to try to complete several tasks at the same time. Start off by lobbing grenades at the first set of blast doors, then go down the ladders and head left.

As the team passes the next set of ladders, split one man off and give him all the explosives. He's got to blast his way round to the pressure pad, but make sure he uses all of his grenades before you leave him as he has a tendency to blow himself up.

While you're doing this, move the rest of the team to the middle and split them. Send two as far down as you can and send the other two straight up, but keep to the right.

As soon as the enemy turret opens fire and blows itself up, head back down and go right. Climb the ladder, get in the turret, blast the other turret, kill everything and then stand them on the next pad. This leaves the team at the bottom. Swim them over to the ladder but stop at the bottom rung and fire upwards as it's mined. When you get them to the final pad, it'll glow red and your helicopter and the enemy's will come over to you.

You've now probably only got about fifteen seconds to blow up all the doors and kill the remaining soldiers while the enemy chopper fires it's heat-seeking missiles at you. Good luck!



ONWARD VIRGIN SOLDIERS





The Zeewolf stops to pick up a passenger. That's bound to earn a good Humanitarian Bonus.

steps into the doorway and any extra left standing outside do not count towards your bonus.

An easy way to get a high Unused Weapons Bonus on Remote Link levels is to make sure you use all the munitions available on the remote link craft. Their weapons are not recorded in the scoring system but what they destroy is.

Extra lives can be gained by returning any abandoned Zeewolves. These can be found in deserted bases on missions 13 and 18. There's also one on mission 31 but that's included as part of the mission.

It's worth remembering that the Remote Link vehicles are disposable, so use them to tackle anything that threatens the Zeewolf.

On mission 9, the Remote Link enemy transport helicopter used to drop the bomb is supposed to die so don't waste time trying to save it once the bomb's dropped.

The Barracuda's torpedoes are the longest range weapons in *Zeewolf 2* , being the full range of the scanner, so use them to destroy all Sharks before they get on-screen. Line up and track your shots on the scanner where the torpedoes will appear as yellow dots.



Radar tanks make all anti-aircraft units in their vicinity much more accurate. They absolutely must be your first target when you find one next to any Mantis or Cobra sights. Failing to take out the Radar tank will mean you will die.

Many Radar tanks are actually on patrol which means they will temporarily leave a Mantis/Cobra unit and will therefore be unable to influence it. This is the time to strike at the Mantis/Cobra unit. Note that ECM Radar tanks, the ones that fill your scanner with static, also give radar support, so there are twice as many reasons to destroy them.

The scrambling range of these ECM Radar tanks is limited, so to get an idea of the area they patrol, fly out to sea or another clear zone and switch to the Tactics screen so you can view the whole map.

ECM Radar tanks also break remote links, so scout the area with the Zeewolf before taking a remote link craft into a potential ECM area. This is doubly important when you're flying the remote link Kestrel.

When you encounter an Ecliptico APC (a Mule), they may appear harmless, but on later missions (all of them above mission 16) they can release Saboteurs (little green men!). So destroy any enemy APCs you see as a Saboteur will blow up the Zeewolf as soon as he touches it.

Finally, certain enemy units do not appear in your gun camera, most notably the enemy radar dishes on ships and buildings.

This is where your Gun Camera Lock Indicator comes in very useful. It will turn green when a lock has been established.

This still doesn't guarantee a hit but it does indicate that your on-board computer has positively identified the target.

Good luck and good shooting!

Helping Hands

THE UNTOUCHABLES

Dear Amiga Format,

Do you know of any cheats or tips for the game The Untouchables please?

Simon Pelley, Windsor

Sure do Simon. While playing, type SOUTHAMPTONGAZETTE. You can now press F10 to skip levels and press HELP to skip to the second half of some of the missions. Also, when you're playing the game, press pause and type in the following to jump to different levels:

1. BRIDE ROLLS
2. MAC N ALLEY
3. KID ZAPPING
4. A NIT IN TIME



Fight all those nasty drink-smuggling types during the prohibition in The Untouchables.



And if you can't be bothered, or aren't good enough, to do it the hard way then simply type in one of the level codes above.

LEND A HAND

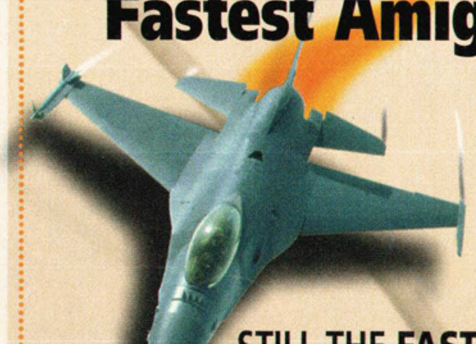


If you've got some hints, cheats, tips or general good advice on any Amiga games, especially some of the newer ones like *Uropa2, Bograts* or anything similar, then don't keep them to yourself. Send 'em in so we can pass them on to other gamers who might be having more problems than you are.

Also, if you've got a query about a game (and no, I don't really mind people asking about *The Secret of Monkey Island* all the time), then likewise, drop us a line and we might be able to answer it in Helping Hands.

HELPING HANDS • Amiga Format
30 Monmouth Street • Bath • BA1 2BW

Harwoods... always the Fastest Amiga Boards and NOW PowerPC Technology for Amigas too!



CYBER BLIZZARD SPEED

STILL THE FASTEST, NOW LOWER PRICED, NO ONE ELSE EVEN COMES CLOSE!

NEW... POWER UP

AMIGA™ GOES POWERPC™

POWER UP YOUR AMIGA...

*A further dimension is being added to Amigas with our new PowerPC based **BLIZZARD POWER BOARDS** for A1200, A1200 based Tower Systems and A1500/2000 systems along with the new **CYBERSTORM PPC** for A3000/4000 systems. You'll now be able to benefit from performance many times beyond the speed of the fastest 680x0 based boards.*

Designed as upgrades for existing systems, **Power Boards** incorporate innovative dual processor technology where a fast PowerPC RISC processor is combined with a 68k CPU, dynamically sharing memory and system busses.

While the original AmigaOS 3.x continues to run on the 68K CPU, supporting existing applications to provide backward compatibility, the PowerPC CPU is backed by comprehensive PPC Libraries which provide the functionality to integrate PowerPC into an Amiga multitasking environment.

Software developers can easily optimise their programs, step by step, porting single tasks to PowerPC code, which then run in parallel with 68k tasks. Leading Amiga software vendors are preparing ported or optimised versions of their software packages already. It is anticipated that a large quantity of software products supporting the PowerPC will be available soon.

Power Boards will be delivered with a comprehensive suite of utilities, including the PPC library, as well as tools for creative users. Among them is a Public Domain GNU C compiler for PowerPC (including sourcecode), many demo programs and utilities with sourcecode. In addition to this software, free developer support is available via FTP site.

Last but not least, a PowerPC optimised version of CyberGraphX V3 with RISC optimised CyberGL/3D plus MPEG functions and libraries is included (along with a special GGX driver to support the AGA chipset) with full and comprehensive documentation.

	Blizzard 603e PowerBoard	Blizzard 603e+ PowerBoard	Blizzard 2604 PowerBoard	Cyberstorm PPC
PowerPC CPU Clock Speed	603e 160-250MHz	603e 160-250MHz	604e 150-200MHz	604e 150-200MHz
Companion CPU	68030 50MHz	68040/68060 25-50MHz	68040/68060 25-50MHz	68040/68060 25-50MHz
Est. PPC Performance MIPS SpecFP95	@ 250MHz Approx. 280* Approx. 3.5	@ 250MHz Approx. 280* Approx. 3.5	@ 200MHz Approx. 350* Approx. 7.1	@ 200MHz Approx. 350* Approx. 7.1
Memory Option SIMM Sockets	Max. 128Mb 2	Max. 128Mb 2	Max. 128Mb 4	Max. 128Mb 4
SCSI On Board	Fast SCSI-II	Fast SCSI-II	Ultra Wide	Ultra Wide
Amiga Compatibility	A1200(T)	A1200(T)	A1500/2000	A3000/4000(T)
Est. Availability	DEC '97	DEC '97	Summer '97	Summer '97

Blizzard 603e Power Board - A1200(T)

The new Blizzard 603e Power Board is an inexpensive Power Up Accelerator for A1200 system owners who already have a board with a socketed full 50MHz 68030+MMU processor (these CPUs have a gold finish to the top surface) eg.50MHz Blizzard 1230-II, III, IV or similar. Featuring a 160-250MHz PowerPC 603e RISC CPU, the board has a socket for the 50MHz 68030, expansion capabilities of up to 128Mb high speed memory and built in SCSI-II controller.

Imagine the performance from your A1200 with this low cost board!

Blizzard 603e+ Power Board - A1200(T)

The Blizzard 603e+ Power Board is the highest spec Power Up Accelerator for A1200 systems. Featuring a 250MHz PowerPC 603e RISC CPU, the board has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 128Mb of high speed memory and built in SCSI-II controller. This board is ideally suited to those owners who already use an accelerator with either a 68040 or 68060 CPU (ie. Blizzard 1240TERC or Blizzard 1260 owners or their equivalents)

If you want the BEST from YOUR Amiga A1200 - this is it!

Blizzard 2604 Power Board - A1500/2000

If you own either an A1500 or A2000 you can now take advantage of PowerPC technology with this 604e CPU RISC based board which has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 128Mb of high speed 64-Bit memory, built in Ultra-Wide SCSI controller and a high performance expansion slot for expansions such as the CyberVision PPC. This board is ideal for owners of accelerators with 68040 or 68060 processors such as the Blizzard 2040 or Blizzard 2060 owners (or their equivalents).

Want the BEST from YOUR Amiga A1500/2000? - Look no further!

CyberStorm PPC Board - A3000/4000(T)

CyberStorm PPC is the ultimate accelerator for Amiga 3000[T], 4000[T] and systems with compatible CPU slots, offer blistering 604e performance - more than 10 times faster than any 68k based accelerator on sale today! Available with clock speeds of 150, 180 and 200MHz, the companion socket for the 68k processor accepts either a 68040 or 68060 CPU. The board provides 64-bit wide extremely fast memory expansion using pairs of standard SIMMs, dynamically shared by the two CPUs. Additionally, CyberStorm PPC comes with a DMA driven Wide ULTRA SCSI controller on board offering transfer rates of up to 40Mb/sec for even the most demanding of professional applications. A 32Bit high speed expansion connector, with DMA access to the main memory, is also provided for later upgradeability.

The 200MHz version of the CyberStorm PPC provides performance of more than 350 MIPS or approximately 8.1 SPECint95 and 7.1 SPECfp95*... breathtaking speed that goes far beyond that offered by most PC systems. In the second half of the year, an advanced graphics board will become available for the CyberStorm PPC expansion slot, providing a subset of the innovative CAIPIRINHA custom chip. By having a stand alone version of the DLRP (Display List Risc Processor), this board will offer superior display capabilities through higher VRAM-based resolutions, pixel depths and speeds, as well as the potential to begin developing software supporting the functionality of the forthcoming A\BOX system.

PRICING AND AVAILABILITY:

Options with or without 68k CPUs will allow users to fit the CPU from their existing accelerator. Delivery of Power Boards is scheduled for Summer 1997 following finalisation of CE approvals. Call now for full details.

Special prices available to existing BLIZZARD & CYBERSTORM board users

Blizzard 603e/603e+ Board...	160MHz	200MHz	250MHz
with Empty 030/040/060 Socket	£269.95	£359.95	£429.95
with 68030/50MHz fitted	£302.95	£392.95	£462.95
with 68040/25MHz fitted	£305.95	£395.95	£465.95
with 68040/40MHz fitted	£331.95	£421.95	£491.95
with 68060/50MHz fitted	£466.95	£556.95	£626.95

Cyberstorm PPC 604e Board...	150MHz	180MHz	200MHz
with No Processor	£479.95	£549.95	£629.95
with 68040/25MHz fitted	£519.95	£579.95	£669.95
with 68040/40MHz fitted	£549.95	£609.95	£699.95
with 68060/50MHz fitted	£709.95	£769.95	£859.95

**Quoted performance figures are estimations based on specifications from Motorola/IBM and are relevant to the PowerPC processor only. Prices Include VAT @ 17.5%. Owners of other makes of board or those who don't already have an appropriate CPU - please call for prices.*

POWER PC TECHNOLOGY, POWER PC SPEED and POWER PC PERFORMANCE

CYBERVISION PPC

BRAND NEW... Estimated Availability FEB '98

HIGH END GRAPHICS CARD for...
PowerUP, CyberStorm PPC and Blizzard 2604 PowerBoards

The CyberVision PPC is a high performance graphic card which can be installed on the expansion slot of the PowerPC 604e based PowerUP Accelerators, the CyberStorm PPC and the Blizzard 2604 Power Board. The use of CyberVision PPC is highly recommended for use with the Blizzard 2604 Power Board to speed access to the ECS Chip Memory or Zorro II based graphics boards found in A1500/2000 Amigas.

Performance of CyberVision PPC benefits from the high data bandwidth achieved by direct connection to the processor bus utilising the graphics direct connector which incredibly speeds up, for example, 3D rendering/display. Breathtaking performance is enhanced not just by the ultra fast processor access into the video memory, but also the internal speed and functionality of the CyberVision PPC.

CyberVision PPC is equipped with the powerful PERMEDIA2 Graphics Controller providing outstanding 3D performance of up to 80 million textured 3D pixels/sec, with hardware accelerated rendering functions such as z-buffering, gouraud shading, fogging, blending and anti-aliasing. As the design of PERMEDIA2 hardware suits OpenGL implementation, its 3D performance can support CyberGL functionality of CyberGraphX V3 Native which is supplied with PowerUp boards. In combination with the high floating point performance of the PowerPC 604e processor, a breathtaking performance in professional 3D applications can be achieved. Additionally, the PERMEDIA2 processor supports functions such as colour space conversion, chroma keying and XY-Scaling which is used by the software MPEG decoding routines of CyberGraphX V3 Native.

- 64Bit Wide SGRAM with data throughput of up to 800Mb/sec - allows ultra fast RAMDAC to display up to...
  1280 x 1024 in true colour at 85Hz screen refresh rate and...
  1600 x 1200 in true colour at 60Hz or high colour at 85Hz.
- 4Mb or 8Mb Display Memory options

CyberVision PPC... 4Mb Display Version — **£CALL FOR LATEST NEWS**
CyberVision PPC... 8Mb Display Version — **£CALL FOR LATEST NEWS**

1260 TURBO ACCELERATOR MEMORY BOARD

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.

A1200 TURBO ACCELERATOR and MMU/FPU
50MHz 68060 - 0Mb Standard, expandable to 64/192Mb
38.71MIPS with single sided 60/70 Nanosecond SIMM fitted.



Offers Amiga A1200 owners FULL 68060 POWER with a board that simply plugs into the trapdoor slot. Your A1200 will then operate at TWICE or even THREE TIMES THE SPEED of an '040 based upgrade and up to FIVE TIMES THE SPEED of a standard A4000! Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

Blizzard 1260 Turbo 50MHz 68060 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 64/192Mb **£319.95** LOWER PRICE!

1230-IV TURBO ACCELERATOR MEMORY BOARD

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.

A1200 TURBO ACCELERATOR and MMU
50MHz 68030 - 0Mb Standard, expandable to 128/256Mb
9.91MIPS with 60 Nanosecond SIMM fitted.



The highest performing 68030 Accelerator available for your A1200. With its 50MHz 68030 and MMU, the 1230-IV offers BETTER PERFORMANCE at a LOWER PRICE. With a Sysinfo rating of 9.91 (using a 60 n/s SIMM) you can see the 1230-IV is very fast... a performance gain of up to 500% is achieved! Via its Fast Expansion Bus, an optional SCSI-2 Controller module can easily be fitted. An industry standard SIMM socket provides for up to 128Mb of auto-configuring 32Bit Fast RAM (up to 256Mb with the SCSI-2 option using its extra SIMM socket).

LOWER PRICES!

Blizzard 1230-IV Turbo 50MHz 68030 and MMU, 0Mb 32Bit Fast RAM, exp. to 128/256Mb **£89.95**
Fast 60 Nanosecond SIMM RAM Expansions - 32Bit, 72Pin **£Call**
Motorola Maths Co-Processor - 68882 PGA type FPU, 50MHz **£39.95**

BLIZZARD SCSI-IV KIT

SCSI-2 MODULE for 1230-IV, 1240T/ERC & 1260, & ADDITIONAL 128Mb SIMM SOCKET
(Fast SCSI-2 DMA Controller - upto 10Mb/s transfer rates with additional SIMM socket/extra RAM)



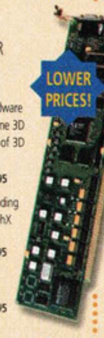
Blizzard SCSI-IV Kit **£59.95**

1230-IV and 1260 FEATURES

- May be disabled with simple keystroke on boot up - for full games compatibility, even badly programmed/older software
- Battery backed self re-charge Real Time Clock
- High performance expansion with full 32Bit wide DMA
- Easy trapdoor installation - no modifications required
- 1230-IV features PGA FPU socket allowing optional 50MHz 68882 FPU

CYBERVISION 64/3D

64-Bit ENGINE A2000/3000/4000 (T Series) 3D VERSION 24-Bit COLOUR ACCELERATED GRAPHICS CARD.



LOWER PRICES!

For all Zorro-3 and Tower System A1200s with Zorro II backplanes. The core of this great board is the VIRGE GRAPHICS CHIP from S3. With 3D capabilities, it's able to process complex 3D functions in hardware (eg. shaded & textured surfaces) with Trilinear Filtering and Shading/Fogging for super realistic Real Time 3D Rendering. When used with CyberGraphX 3D library, Cybervision 64/3D can even offer a broad range of 3D facilities for any software developer.

CyberVISION 64/3D... 4Mb Version **£139.95**

MPEG Decoder - added to the Feature Connector to provide real time MPEG audio and video decoding at full size custom screens or, in Workbench windows (HQ display using 16/24Bit modes from CyberGraphX Workbench). Stereo audio output is provided via the supplied dedicated line output jack. Upgrade to a Cybervision 64/3D and MPEG bundle (from previous Cybervision 64) for a special low price! **£149.95**

Monitor Switcher - with integrated scan line doubler. Designed to fit into the Amiga slot, this gives full automatic switchover from the standard Amiga signal to Cybervision 64/3D's output. Both cards may be fitted inside A3000/4000 models leaving three Zorro-III slots free. **£69.95**

CYBERSTORM II

AMIGA 68060 ACCELERATOR



LOWER PRICES!

Cyberstorm II is an ultra powerful graphics accelerator. When you fit a Cyberstorm II 68060 Accelerator to YOUR A3000, A3000T, A4000 or A4000T you can for example, render a graphic with Imagine 2.0 software in just 2.4 minutes! Compare that with 10.34 minutes on a standard A4000 '040/25!
With no jumpers, both Cyberstorm II models are fully plug and play and, A4000 users even have the option of a SCSI-2 Module if they wish (A3000s already have SCSI built in).

- Up to 128Mb of standard SIMMs can be installed and you can even transfer the 72Pin SIMMs from your Amiga A4000 straight onto your new Cyberstorm.
- Optional SCSI-2 Module
- If your budget currently only covers the cost of Cyberstorm II 68040ERC, you can always upgrade later to the full 68060 processor for the extra power!

Cyberstorm II 68060/50 50MHz 68060 - 0Mb, Expandable to 128Mb LAST FEW AVAILABLE... **£389.95**
Cyberstorm II SCSI-2 Module **£69.95**
Cyberstorm II SIMM RAM Expansions (Please call for a range of SIMM prices) **£Call**

CYBERSTORM III

AMIGA 68060 ACCELERATOR



BRAND NEW...

NEW Cyberstorm III is the latest high end 68060 Accelerator Board for YOUR A3000, A3000T, A4000 or A4000T (or system with compatible slot). Features a high performance 68060 processor at 50MHz clock speed, a memory expansion option for up to 128Mb of ultra fast 64Bit memory, a Wide-Ultra-SCSI controller on board and an expansion slot for high performance expansions such as the CyberVision PPC.

- Up to 68Mb/sec sustained memory transfer rate - ideal for applications demanding the use of large amounts of data. Memory design of the Cyberstorm III is 50% faster than the Cyberstorm II resulting in real world application performance increases of up to 25%!
- Wide-Ultra-SCSI Controller onboard
- Expansion up to 128Mb of ultra fast 64Bit memory
- Expansion slot for high performance expansions - eg. CyberVision PPC etc,

Cyberstorm III 68060/50 50MHz 68060 - 0Mb, Expandable to 128Mb **£469.95**
Cyberstorm III RAM Expansions (Please call for a range of RAM prices) **£Call**

MOTOROLA MOTIVATED

Blizzard and Cyberstorm products use MOTOROLA 680X0 and PowerPC series processors. They run **WITHIN** the electrical timing specification laid down by Motorola to prevent any possible overheating/reliability problems. So, when you pay for a 50MHz CPU for example, that's exactly what you get... not a 40, 33 or even a 25MHz CPU "clocked" to 50MHz! Look out for the **MOTOROLA MOTIVATED** logo - your guarantee of our commitment to quality and reliability - **BEWARE** of "clocked" CPUs! T/ERC and ERC processors used on selected boards are recycled and vigorously tested 68040 CPUs operating at 40MHz - an excellent guaranteed and competitively priced alternative.

What the Magazines think...

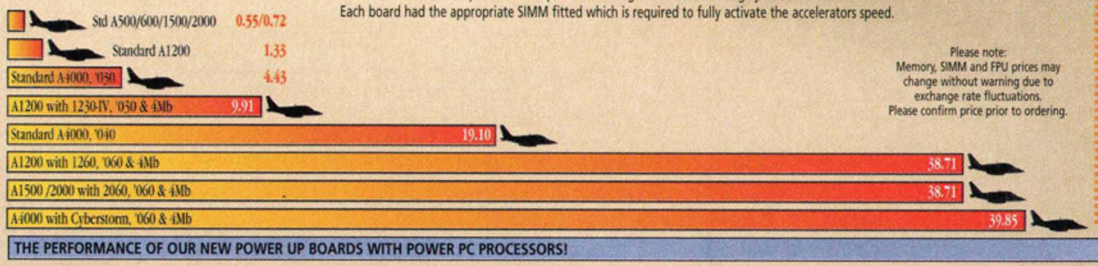
Blizzard products have consistently achieved the highest magazine accolades and awards!

Amiga Shopper *"...1260 is destined to become the ultimate object of desire for A1200 owners."* - **91% STAR BUY Award**
Amiga Computing *"...If you want the fastest Amiga in the World, get this board."* - **92% BLUE CHIP Rating**
Amiga Format *"...Ride on the fastest A1200 in the World..."* - **95% GOLD Rating**

OUR RANGE HAS WON MORE AWARDS THAN ANY OTHER

JUST COMPARE THE PERFORMANCE FIGURES FOR YOURSELF!

Comparative MIPS performance figures measured using SysInfo.
Each board had the appropriate SIMM fitted which is required to fully activate the accelerators speed.



Please note:
Memory, SIMM and FPU prices may change without warning due to exchange rate fluctuations.
Please confirm price prior to ordering.

PD Select

Dave Cusick once more trawls through the PD mailbag to bring you another helping of affordable excellence.

BLIZZARD '060 UTILITIES

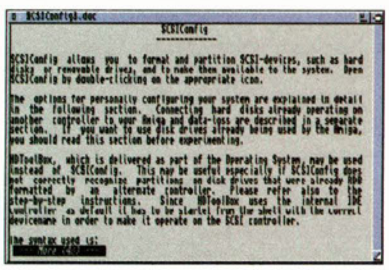
By:	Various
Ware:	Free
PD Library:	OnLine PD
No of disks:	1
Price:	75p + 75p P&P

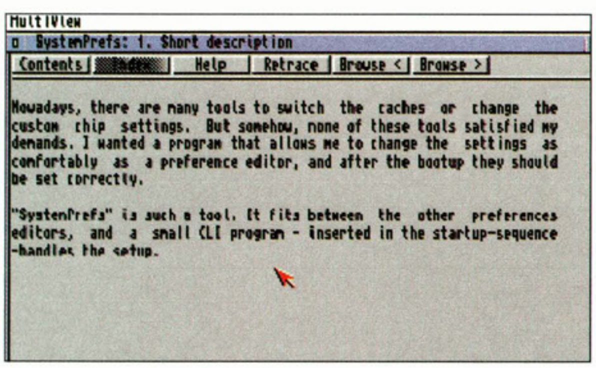
Buying an '060 card for my A1200 is one of the things I've been meaning to do for absolutely ages, but have never quite got around to. There's always another more pressing need – be it an urgent bill to pay, an expensive problem with the car to sort out, or whatever – and so I end up stuck with my trusty '030/50, and a machine that absolutely crawls along when running complicated pieces of software.

If you're lucky enough to own an '060 then this disk contains some bits and pieces that might prove interesting.

First up, there's version 40.353 of the 68060.library, and a small program called *Make060* which sets a flag to tell '060-sensitive software that you do indeed have the CPU installed.

Then there are some small phase5 programs that enable you to format and partition SCSI devices, configure them so they are available to your Amiga and control them from the Workbench.





Another top batch of utilities with something for everyone who has an '060 (left, below).

Another program allows your machine to address MS-DOS formatted volumes as if they were AmigaDOS volumes, and there are a couple of extra SCSI-type tools thrown in for good measure. There is a short file detailing how to overclock an '060 by replacing the 50MHz clock generator with a 55 or even 60MHz clock generator, and an accompanying circuit-board diagram to illustrate what is involved.

The author, Artur Muszynski, says his machine runs reliably at 60MHz, although of course there is always a risk involved in overclocking a CPU, so this hack isn't going to appeal to everyone.

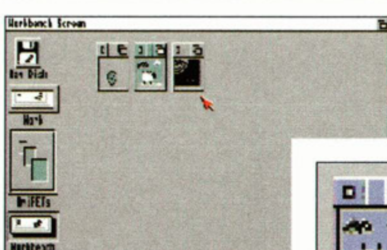
Finally, SystemPrefs is a tool which allows you to play around with the cache settings, control the RAMSEY chip found on A3000 and A4000 machines and increase the speed at which your RAM is accessed. This may appeal to the more technically aware owners of all manner of Amiga CPUs, because the settings it covers apply to a range of machines from the 68010 upwards.

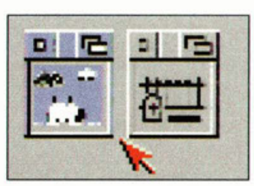
Obviously, as with hacking around with your CPU speed, playing around with system settings isn't something that beginners should attempt.

This is definitely a disk for more technically minded '060 owners, but if that description applies to you then the chances are you'll find something that will be of value here.

AMIPET

By:	L A Atkins
Ware:	Free
PD Library:	F1 Software
No of disks:	1
Price:	80p + 75p P&P





Erm, we were too busy to look after our pets (above, right) and they don't look too frisky now...

Every six months or so a new craze seems to come along in the world of kiddies' toys. Throughout the early stages of my youth the original *Star Wars* toys were all the rage, but in recent years the crazes have become more short-lived and much more bizarre.

Following on from the likes of the Teenage Mutant Ninja Turtles and the Power Rangers, the last year has seen absolutely startling success for "virtual pets" on a keyring. Nice.

I have a friend who works in the toy department of a large department store, and he would happily take a machine gun and annihilate the fellows responsible for unleashing Tamagotchi toys on the world. This summer (he has informed us on numerous occasions over a quiet pint in the local), barely a day went by without twenty or thirty kids pestering him for the toys.

Invariably, of course, the store didn't have any. New stocks sold out within a few minutes of their arrival, with dedicated/rich/stupid parents actually rolling underneath the metal security blinds when the store opened in the morning, and jostling one another for position as they descended the escalator into the toy department. This was all so that they could grab one of the ten or fifteen new toys which had been allocated to that particular store.

I can guarantee that keyring pets aren't a teacher's best friend either. Having to compete for attention with a poorly animated LCD dinosaur that needs feeding, playing with and berating in approximately equal measures really wasn't what made most teachers take up the profession, I'll bet.

Some kids have made money out of their sad dedication to these pathetically crude playthings, offering babysitting services for their even sadder friends.

Quite why anyone would pay for a keyring pet and then pay someone else to actually do the periodic button-pressing which surely amounts to the only enjoyment to be gleaned from the darned things is quite

PD selection of the month

Morton Strikes Back

By:	David Parsons
Ware:	Licence
PD Library:	F1 Software
No of disks:	1
Price:	£6.99 + 75p P&P

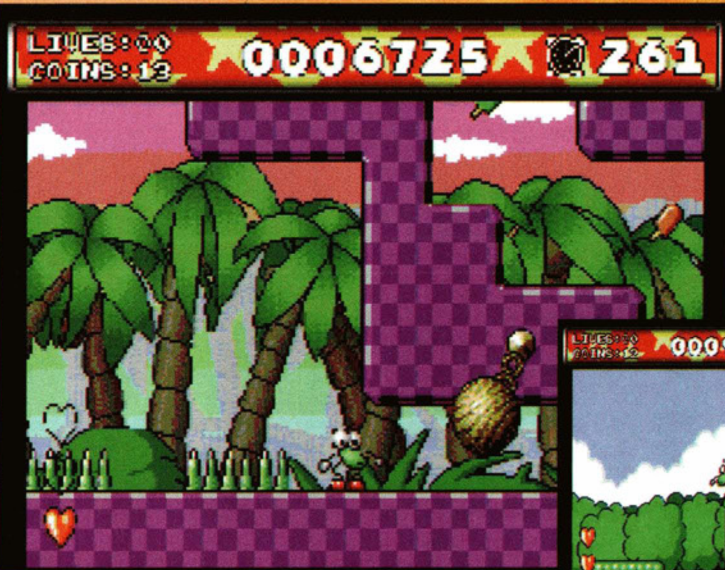
Morton Strikes Back **was an absolute breath of fresh air to this cynical hack, slaving over his third PD column in barely a month as a result of** ***Amiga Format's*** **dedication to providing you lovely readers with a special Christmas issue of the magazine. Some of the stuff sent in to PD Select simply doesn't cut the mustard, but in contrast,** ***Morton Strikes Back*** **puts many commercial offerings to shame. What we have here is platform action par excellence. A truly polished product in every way,** ***Morton Strikes Back*** **features addictive and responsive runny-jumpy gameplay, the like of which has not really been seen since the era of** ***Zool.***

It isn't especially surprising that ***Morton Strikes Back*** **is such a good game considering it was programmed by David Parsons, the chap who produced the rather excellent** ***Og! The Caveman,*** **which was reviewed in issue 102.**

Morton himself is a lovable central character, gloriously animated to the extent that he is capable of performing all sorts of endearing actions, such as teetering on the edges of platforms. He must make his way across loads of colourful, beautifully drawn levels, bouncing on the heads of all manner of cutesy foes, collecting coins and fruit and avoiding swinging pendulums, bottomless pits and the like.

Admittedly it has been done a thousand times before, but when it's done this well then it really is impossible not to love a game like this. With presentation that is hard to fault, marvellous graphics, gameplay which is responsive and fair while still being challenging, atmospheric cutesy music and a whole lot more to offer, ***Morton*** **is undoubtedly one of the best games I've seen in months.**

If you don't have an AGA machine, just ask for the non-AGA version which is available for £4.99. This is one not to be missed at any cost.





Gorgeous graphics and great gameplay abound in top arcade platformer ***Morton Strikes Back.***

beyond me. It takes all sorts, I suppose.

AmiPet isn't the first program to attempt to bring all the fun and excitement of virtual pet ownership to your Amiga screen, but it's probably the only one to have appeared so far that can actually be run in the background while you are getting on with something ever so slightly more useful. It's also the only program that enables you to design your own pet by customising the graphics as you see fit.

Along with the standard AmiPet you'll find AmiSheep and AmiSpider, examples of the tremendously diverse range of totally different beasties you can thus produce.

From the program menu you can choose whether to play with your pet, feed it a snack or a proper meal, clean it, punish it or call in the vet. You can also consult the stats screen to see how long your pet has been alive and just how fit it is. It costs a lot less than the real McCoy, and kids can't take it to school in their pocket, which I think has definitely got to be a good thing.

However, that's the only good thing. *AmiPet* is as completely useless as a proper keyring pet, and using it to bring up your own little beastie is an absolute waste of time and effort.

Indeed, to all rational beings, *AmiPet* is no more deserving of space on your hard drive than Shane Richie is deserving of air to breathe. Get it for your kids, they'll love it.

CLASS HARD DRIVE UTILS 24

By:	Various
Ware:	Free
PD Library:	Classic Amiga Software
No of disks:	1
Price:	£1.00 + 75p P&P

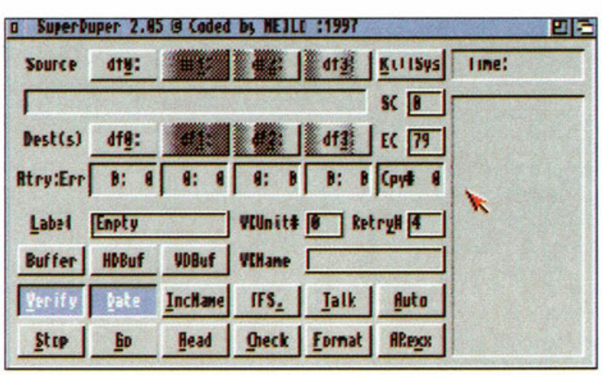
This disk contains another collection of utilities designed to offer something for everyone - an objective which has pretty much been achieved in this case. It doesn't just offer programs, however. For a start, there's issue 5.07 (August 1997) of *Amiga Report*, a typically varied collection of news, reviews and opinions from Jason Compton et al. In AmigaGuide format, *AR* is released at regular intervals and Net users will be aware that the release of a new issue usually generates something of a buzz amongst the Amiga on-line community.

Amiga Models Guide is an AmigaGuide document that details the specifications of each of the machines in the range, from the original A1000 through to the A4000t, along with the possible expansion options they offered.

There is also an Amiga Hard Disk Guide, which talks you through the process of choosing, installing and using a hard drive, as well as some of the problems that can arise.

As for utilities, there is *FixDisk 1.2,* which is designed to help you recover as much as possible from a broken disk in much the same way as Dave Haynie's life-saving *DiskSalv. SuperDuper 2.05* is a handy disk copier with some powerful features and *DiskSafe* is a patch to prevent your Amiga failing to validate a disk which is being accessed when you reset your machine.

NewPassword 1.1 is, unsurprisingly, a password protection tool, featuring a

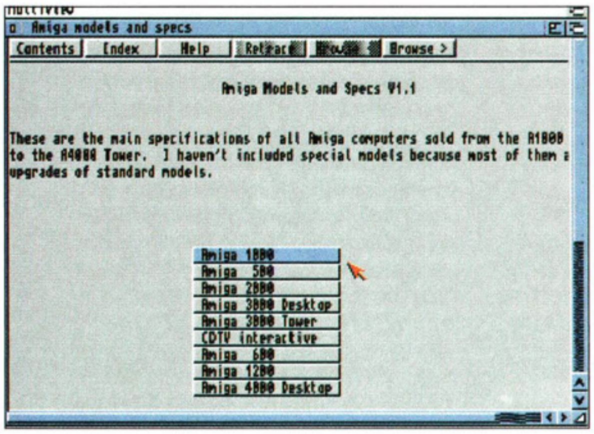


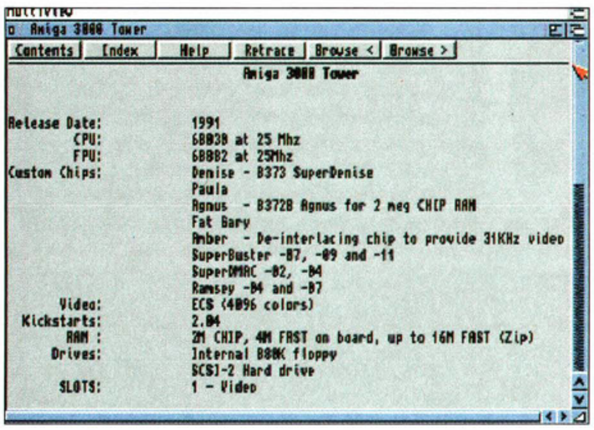
A very handy disk copier which is included on this collection of hard drive utilities.

Continued overleaf ➡

nice graphical user interface and a fair few options. *JoyMouse* enables you to use a CD32 control pad in the game port to control the mouse pointer, so if you want to play a two player game you don't have to keep plugging in and unplugging the mouse just to load up the program.

VCopy 2 is a substitute for the DOpus copy command, which functions identically until it discovers duplicate





Everything you needed to know about every Amiga ever, and this is only one of the useful utilities here!

filenames, whereupon it will pop up a requestor displaying the version numbers of the source and target files and asks if you'd like to copy the source file over the target.

There are also recent versions of the asl and req libraries, a utility for rekicking a Kickstart ROM with Blizzard Turbo boards and an enhanced version of the Install command used to create bootable disks. All in all, a useful bunch of programs.

SHELLS

By:	Rachy of BioHazard
Ware:	Free
PD Library:	OnLine PD
No of disks:	1
Price:	75p + 75p P&P

Shells is a simple gambling game which might help pass away a few minutes while you're waiting for your machine to complete some task or other. The computer places a ball under one of three shells and then switches them around a few times. You have to identify which shell the ball is hidden under.

Basically, it's just the sort of straightforward sleight-of-hand game so often seen in movies, although here betting against the showman is replaced with a basic scoring system, and the objective is to obtain as high a score as possible before you eventually slip up and identify the wrong shell.

The graphics are quite nice and well animated, although it's annoying that a disk access is required every time you start a new game in order to load them into memory.

You can play on one of three difficulty levels. The novice setting is ridiculously easy for anyone who hasn't just drunk half a barrel of lager but the expert setting requires some extremely attentive shell-watching.

There is a high-score table too, so if you do actually load the game up more than once then you can see whether you are getting any better at it.

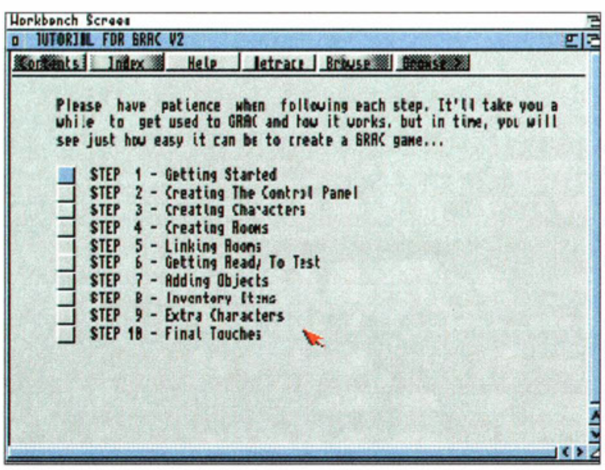
GRAC V2 TUTORIAL

By:	Andy Gibson
Ware:	Licence
PD Library:	F1 Software
No of disks:	2
Price:	£4.99 + 75p P&P

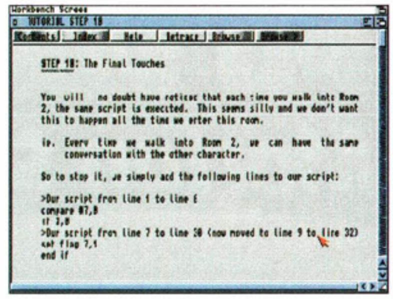
Version 2 of the *GRaphic Adventure Creator* is one of F1 Software's best-selling titles. Costing just £6.99, it's a powerful piece of software which has already been used to produce some top-class PD and licenceware adventure games. The problem with *GRAC* is that the instructions which come with it are frequently less than clear about exactly how you do certain things.

Some while ago F1 Licenceware released a *GRAC v1* tutorial, but with a host of features which version 1 didn't include. *GRAC v2* really merits a tutorial of its own and Andy Gibson has set out to provide a comprehensive survey of all aspects of *GRAC*, from working with the interface generally to actually constructing a proper game.

The tutorial is presented in AmigaGuide format, and although



A complete step-by-step tutorial to using *GRAC*, which will have you developing your own graphic adventures in no time.



Once you've got this far, your own adventure game will be near completion. Huzzah!

perhaps full use is not made of the hypertext medium, this certainly makes for an easily navigable guide.

There is a detailed guide to the *GRAC* editor, a ten-step guide to the process of designing all the individual aspects of a game and then tying them together, and a detailed exploration of all the commands *GRAC* offers. This is intended to complement, rather than replace, the original printer manual supplied with *GRAC* itself.

Finally, there is a section discussing known flaws in *GRAC* and ways of overcoming a few of them. The second disk contains support files including source code and helpful illustrations.

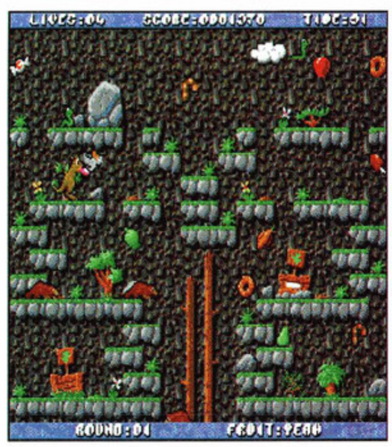
Written in a clear and friendly manner, this tutorial should prove absolutely invaluable to anyone about to embark on writing their own fully-fledged adventure romp.

KANGY

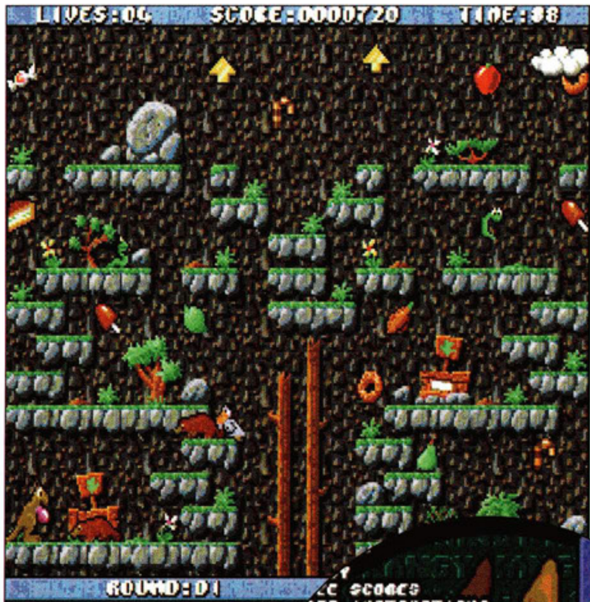
By:	Luca Carminati
Ware:	Free
PD Library:	F1 Software
No of disks:	1
Price:	75p + 75p P&P

They say lightning never strikes twice, and yet in one month PD Select has received not one but two highly polished platform games. *Kangy* isn't quite as good as *Morton Strikes Back*, but it's still not a bad effort at all.

The likeable Kangy, a cute kangaroo, has to make his way around



Kangy show off his boxing skills by beating up a passing bird.



Kangy's on a bit of a sticky wicket here, being cornered by a variety of cute-looking, but deadly, little beasties.



screen after screen of platforms littered with fruit and populated with nasty creatures. The fruit must be collected and deposited in wooden boxes in order for Kangy to progress to the next screen. There are eight screens in this demonstration version of the game, but by registering (which will cost you 25,000 lire) you can obtain a version with 40 levels, which should be more than enough to keep even the most talented platform player busy for a few millennia.

Moving the joystick sideways makes Kangy move along in small bounds, and pushing up at the same time as pulling sideways increases the size of his bounds, so he can leap from one platform to another. He can jump downwards, but if he jumps too far down in one go then he will end up plummeting to his doom.

Curiously for a marsupial, Kangy is quite a proficient boxer, and when he is standing still a quick press of the fire button will make him punch any creatures that happen to be passing.

The graphics are lovely, the music's not bad and overall it's difficult to fault *Kangy* in terms of presentation. I have to say that I did find the control system a trifle unresponsive and as a consequence I quickly ended up becoming frustrated. The situation isn't helped by the fact that the baddies which populate the levels can very quickly start swarming towards Kangy, giving him little chance to escape.

If you've got the patience to persevere, *Kangy* represents a colossal challenge and is sure to provide many hours of entertainment. However, it's not one for those with a short fuse.

BANK MANAGER V2.55 DEMO

By: .... G Proctor
Ware: .... Share
PD Library: .. Classic Amiga Software
No of disks: 1
Price: .... £1.00 + 75p P&P

If you're anything like me then you will only have an approximate idea of how much money is in your current account at any given time, perhaps to within a hundred pounds or so at best.

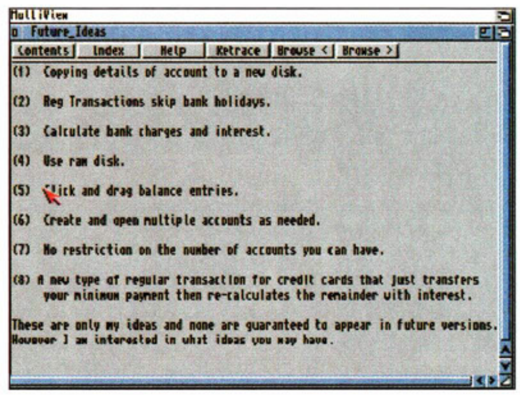
Your bank statement will tell you what's currently there, as will, in all probability, your nearest Automatic Telling Machine, but that's not always good enough. The reason for this is that on any one day the balance of your account might not be a true reflection of exactly what you've spent, as there could be cheque or debit card transactions yet to clear, your wages might not yet have got through, or whatever.

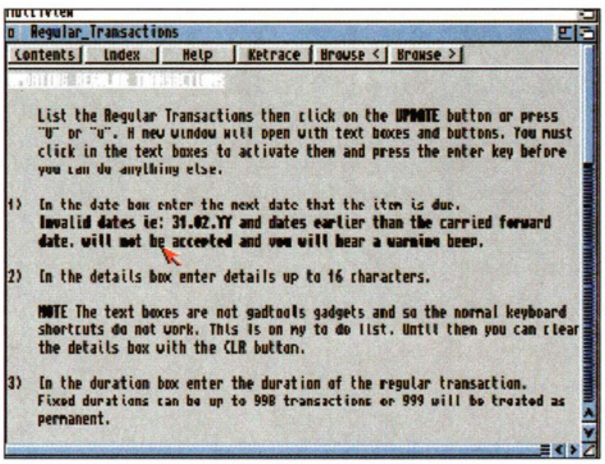
Bank Manager is designed to help take away any uncertainties you might have over exactly how much money you have (or don't have, as the case so often seems to be). It might not have the most appealing interface in the world, but it is certainly a powerful enough piece of software. You can tell it about your regular direct debit payments and standing orders, and your regular income and bills, then hit a button and find out exactly how much cash you are going to have at various times over the coming weeks or months.

If you are worried about the potential effects of spending a large amount of money on something, enter it as a debit and see how your finances would look had you bought it for real. Then you'll know whether or not you can really afford to spend all that money.

In this demonstration version of *Bank Manager* you can only have one account, and you are limited to 12 regular transactions. Still, there's enough here for you to decide whether you want to part with a tenner of your hard-earned cash for the full version of the program.

Because of the way in which *Bank Manager* works, it's more suited to those who have regular transactions going in and out of their accounts, although that's not to say it isn't useful to those of us who aren't that organised. In actual fact, *Bank Manager* might motivate you to get your transactions organised properly, which isn't a bad thing at all. AF





Bank Manager comes with detailed and straightforward instructions on how to get all of your transactions organised properly.

Top 10 Public Domain titles

1. BATTLESCAPE
2. DARK CITADEL
3. OG! THE CAVEMAN AGA
4. BOSCAR
5. NODDY'S PLAYTIME
6. HYPRA
7. NEW ICONS 4.1
8. TYPING TUTOR
9. AGASSM V7.24
10. HYPER VIPER

F1 Software, 1 Lower Mill Close, Goldthorpe, Rotherham, S. Yorks, S63 9YB. Tel: 01709 888127

GET YOUR DISKS FROM:

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Manchester
M26 2SH
Tel: 0161 723 1638

ONLINE PD
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Halsall Lane
Formby
Liverpool L37 3PX
Tel: 01704 834335

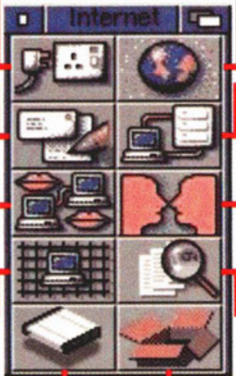
OTHER GOOD PD LIBRARIES

All You Need For Internet And Comms!

netconnect v2

NetConnect v2 is even easier to connect to the Internet! Launch the new Wizard GUI, choose your modem, enter a few user details and let the Wizard do all the rest for you! Simple! With version 2 you don't even need to worry about the provider - everything is automatic, everything is point and click! ***Amiga Format*** concluded about **NetConnect v1** (June 97 issue): "Almost the perfect package for the Amiga Internet user", "If you need to get online, this is the easiest way to do it" and "It's good value for money too - especially the bundle including the 33.6K modem." We have listened to our NetConnect v1 users, noted their comments and added some other new features. NetConnect v2 is available on CD-rom and floppy disk.

11 Commercial Programs within NetConnect v2!



AMITCP-GENESIS
NetConnect v2 users will be the first people to use this new TCP stack! Based on AmiTCP Pro, we have added a number of changes - new Wizard, MUI based dialler, multi-user support, 'events' control, status window (time on 'net, connection speed), new prefs.

MICRODOT-II
A superb combined email and newsreader within one GUI! Contains all the major features you would expect - MIME attachments, support for POP3/APOP, search function, multiple signatures, multiple user support, Arexx port etc.

AMIRC
Chat online with friends about topics, join conferences, organise mass meetings. The IRC is one of the most addictive elements of the Internet - AmIRC is the best Amiga IRC client.

AMTELNET
Telnet into remote computers (from anywhere in the world) - edit files on a computer in Germany from your Amiga, maintain directories for your web pages, check the status of the network, play online games.

AMTERM
AmTerm is a communications package which allows you to connect to a BBS, to another user (direct link), transfer files via a serial connection (Amiga<>Amiga, Amiga<>PC etc).

VOYAGER-NG
Voted the best Amiga web browser by CU Amiga - supports SSL for securing ordering, HTTP 1.1 (for the fastest web access) fastmem AGA support (use fast mem to store images) and very soon JAVA™, Javascript and AGA fastmem support!

AMFTP
AmFTP is the ultimate Amiga FTP client. Download/upload programs from any FTP site, also supports ADT to allow you to download the latest files from the Aminet and Archie to search FTP sites for files.

AMTALK
A direct chat client for the Amiga. Acts as an online answerphone service for people to leave messages. You can talk directly 'realtime' to friends on the Internet.

NETINFO
NetInfo is a cool tool for analysing the network and the people connected to it - 'finger' your friends to see if they are online, 'ping' servers to find the response speed.

X-ARC
X-Arc is the Amiga's answer to WinZIP™ - automatically decode LHA/LZX/ZIP files, edit the contents of these archives, create your own archives. Full integrates with NetConnect v2!

NetConnect v2 is a state-of-the-art Internet package aimed towards Amiga users wanting to connect for the first time (absolute Internet beginners), those who have been connected a few months (novices) and now, due to the keyfile nature of the software, is suitable for advanced Internet users who want to use the modules contained within NetConnect with their existing TCP stack. **NetConnect v2 enhancements include**:

- **MIME Prefs** - Central MIME prefs interface means that you only need to setup file types once with on nice interface! This saves masses of time and effort (esp. for beginners).
- **Setup Wizard** - makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic!
- **New programs** - AmTalk, NetInfo and X-Arc (a brand new WinZIP™ style archive management tool. Downloads lha/lzx/zip files from Voyager etc, auto-extracts them into X-Arc's GUI and allows you to control the files).
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Extras pre-configured**: MIME types (CD only), datatypes (CD Only), online help files etc
- **Octopus** - allows you to create multiple dock bars with point and click ease - just drag the icons you have created into the icon bar! NetConnect v2 is pre-setup with its own icon bar for ease of use.
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Printed manual** - understand NetConnect and the Internet quickly and easily (advice from NC users!)

NetConnect v2 CD	[contains many extras: datatypes, MIME types (for www browsing) and much more]	**£52.95**
NetConnect v2 Floppy Disks	[only contains the core programs & online help documents]	**£54.95**
NetConnect v2 Upgrade from v1/v1.1	[registered NetConnect v1/v1.1 users only]	**£call!**

vapor software

If you are not interested in purchasing NetConnect you can also buy Vaporware Products individually either by disk, a keyfile sent via e-mail (quickest and cheapest method) or on CD-rom (currently only Voyager-NG and Genesis can be purchased on CD-rom) - CD versions have added extras such as pre-setup MIME types (VNG), HTML documentation etc.

	On CD	By Disk	By EMail
Genesis - New TCP/IP Stack for the Amiga [Available December]	£28.00	£22.00	£20.00
Miami - TCP/IP Stack for the Amiga	n/a	£28.00	£26.00
Octopus - Brand new dock bar creator [Available December]	n/a	£12.00	£20.00
Voyager Next Generation	£28.00	£22.00	£10.00
Microdot-II	n/a	£20.00	£18.00
AmIRC	n/a	£20.00	£18.00
AmFTP	n/a	£20.00	£18.00
AmTalk	n/a	£17.00	£15.00
X-Arc	n/a	£17.00	£15.00
AmTelnet + AmTerm Package Deal	n/a	£20.00	£18.00
AmigaNCP - Amiga to Psion series software	n/a	£27.00	£25.00

- *5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+*

internet informer

Still unsure about connecting to the Internet? Confused by all the acronyms such as 'ISDN'? Confused about the costs? Wondering whether your Amiga can access the Internet? No need to worry any longer - we have released issue 2 of our 'Internet Informer' for Amiga users. A leaflet that offers you all the information you require in order to get your Amiga onto the Internet. Modem choices, software that is available, service providers for the Amiga, questions and answers. It also contains information about NetConnect and what we can do to get you onto the Internet. For your free copy, call us or write to us.

high quality modems



K56Flex modems are here! Download software and web pages <u>upto</u> twice the speed of a 28.8 modem. 56k modems will operate at 33.6K speeds for uploading but you can cut your phone bills drastically when using the 56K technology! Isn't it about time you upgraded that 14.4 or 28.8 modem? For further information about the new K56Flex (Rockwell developed) technology contact us!

We only supply quality **branded** modems (Dynalink UK Ltd or Diamond SupraExpress), which may cost slightly more than their unbranded competitors, but they ship with a 5 year warranty, the knowledge that a UK company offers support/information and you are buying a modem with quality (Rockwell based) components.

K56Flex modems need to connect to another K56Flex modem in order to use 56K technology (make sure your provider supports K56Flex technology). Call for further technical details.

56K and 33.6K External Data/Fax/Voice Modems

- Quality branded Dynalink or Supra modem
- 33600 bps DATA/FAX/VOICE modem - true v34. Throughput to 115,200 (230,400 for K56Flex) BPS via V.42 bis data compression
- Group 1, 2 & 3 send/receive FAX (14.4)
- Voice Commands - DSVD upgradeable (by software)
- V.80 (video conferencing) capable
- Call Discrimination
- Fax on demand
- Caller ID and Distinctive Ring enabled
- Simultaneous voice and data (S.V.D.)
- Speakerphone for hands-free operation
- Upgradable ROM chip
- Includes headphones/microphones - for voice control
- 5 year warranty
- Serial cable included



£104.95

modem pack options

Various money saving packs are available. These are all based on either the 33.6k, 56k or ISDN modem plus a a collection of extras. Call us for other pack options if you have your own pack idea!

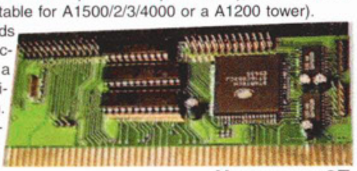
Code	Pack Contents	£ Prices
PK01	33.6 Modem & STFax	£ 89.95
PK02	33.6 Modem & NetConnect	£109.95
PK03	33.6 Modem & NetConnect & STFax	£119.95
PK04	33.6 Modem & NetConnect & Hypercom1 & STFax	£149.95
PK05	33.6 Modem & NetConnect & Hypercom3Z & STFax	£169.95

ADD £25 for a 56k Modem (instead of the 33.6k model)
ADD £50 for an ISDN Terminal Adapter (instead of the 33.6k model)

- All packs come with one month free connection to a major Internet Service Provider
- Choose between the CD or Floppy disk version of NetConnect with your modem pack
- NetConnect = v2, STFax = STFax Professional

high speed serial cards *new models!* from.. £44.95

The ***Hypercom*** range of high-speed serial cards offer your Amiga the fastest connection to the Internet, for comms and fax transfers. Available for the Amiga 1200 (these serial cards are placed within the internal clock expansion port - leaving the PCMCIA port and trapdoor free!), A1200 Towers and Zorro-II/III based machines (Zorro version suitable for A1500/2/3/4000 or a A1200 tower). These cards are currently the fastest serial cards available for the Amiga (upto 460,800bps connection). The Hypercom 3/3Z cards also ship with a buffered high speed parallel port which will drastically improve printing speeds on a laser (4x speed). The Hypercom 3/3Z cards contain a 9-pin and standard 25-pin serial ports whereas the Hypercom 1 ships with one 25-pin port. Serial and parallel drivers included. English documention.

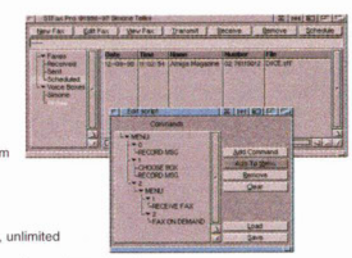


Hypercom 3Z

Model	Machine	Specifications	Price
Hypercom1	A1200	1 x 460,800bps highspeed buffered serial port	£44.95
Hypercom3	A1200T	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec buffered parallel port	£89.95
Hypercom3Z	Zorro-2/3	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec buffered parallel port	£79.95
Hypercom4	Zorro-2/3	4 x 460,800bps highspeed buffered serial ports	£99.95
Hypercom3i	Zorro-2/3	Expansion module for Hypercom 3Z/4 offering 2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec buffered parallel port. Just plugs onto the card, no Zorro.	£59.95

stfax professional £29.95

STFax Professional is new commercial fax program for the Amiga containing the sort of advanced features you would find within commercial PC fax software. STFax has been in the shareware for the last few months, and the brand new commercial "professional" version offers even more advanced features plus voice control for voice modems - use your Amiga as a digital answer machine, create a fax on demand service (ideal for small businesses. Allows your customers to contact you at any time and use fax on demand to remotely download facsimile information about your products!) and create advanced voice control scripts.



- **Full Fax Features:**
  - Support for all fax/modem classes (1, 2, 2.0)
  - Phonebook (store all your favourite fax and telephone numbers)
  - Scheduler (store fax messages to be sent at specified times)
  - Reports (quickly see when a fax was sent and received)
  - Datatypes support for image conversion
  - Printer driver to redirect all print-outs to a fax file (print from Wordworth, Pagestream etc!)
  - Viewer for viewing outgoing/incoming fax messages
  - Fax forward (forward faxes to another machine)
- **Advanced Voice Features:**
  - Use your Amiga as an answer machine (digital messages, unlimited storage space!)
  - Advanced voice scripting - create your own voice network or fax on demand service
  - Use your modem as a telephone (make and receive calls via STFax Pro and your modem)
  - Remote access (listen to your messages from an external source. ie. from another country!)
  - Caller-ID (see exactly who has called and left you a message)
- **Your Own Mini-BBS:**
  - One or more secure 'doors' (access areas)
  - Point and click setup
  - Allow users to upload files and send messages
  - Custom greetings and menus

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Fax: 01325 460117
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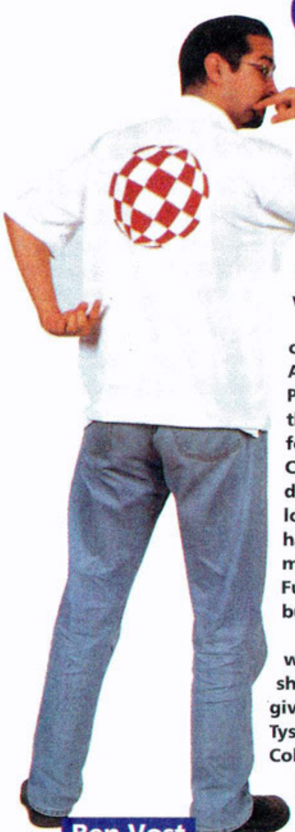
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H'Ware	- £4 for 2-3 day delivery - £6 for next day delivery - £call for Saturday delivery

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SERIOUSLY AMIGA

In-depth reviews of hardware and software that you can trust.



Christmas may be in three day's time for me, and the anticipation of what I'll receive is still there, but for you it'll be a dim and distant memory. I hope you had a pleasant time and got exactly what you wished for.

Especially, of course, if it included any Amiga goodies. Personally, the only thing I'm hoping for is for Santa to bring me a CyberStormPPC, but I doubt he's that well-loaded. Ah well, I'll just have to save up the meagre pennies that Future pay me so I can buy one for myself.

If you're wondering about the t-shirt, it's a special one given to me by Petro Tyschtschenko at the Cologne show, one of only a few. Perhaps we'll give it away, if you're very lucky...

Ben Vost

AMIGA FORMAT'S REVIEW POLICY

...is very simple. ***Amiga Format*** is staffed by some of the most experienced Amiga users in the world and what we say goes. OK?

WHAT OUR REVIEW SCORES MEAN

90+%	The crème de la crème. Only the very best, most versatile and effective products are awarded an ***AF Gold*** – the most highly prized rating there is.
80-89%	These products are very good, but there are minor flaws or areas that could be improved upon.
70-79%	Not a bad product but quite possibly one that needs a serious update.
60-69%	Average products with somewhat limited features and appeal. Products in this category tend to be flawed.
50-59%	Below average products which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality products with major flaws.
Under 40%	The absolute pits.

Power Tower

Re-housing your Amiga needn't mean getting a mortgage. **Nick Veitch** assesses this feature-packed alternative.

The A1200 has its detractors, but it is the last home computer to have that "yes, this is the keyboard, but where's the computer" feel. Although this is advantageous in many circumstances, it isn't ideal for those who are always adding bits.

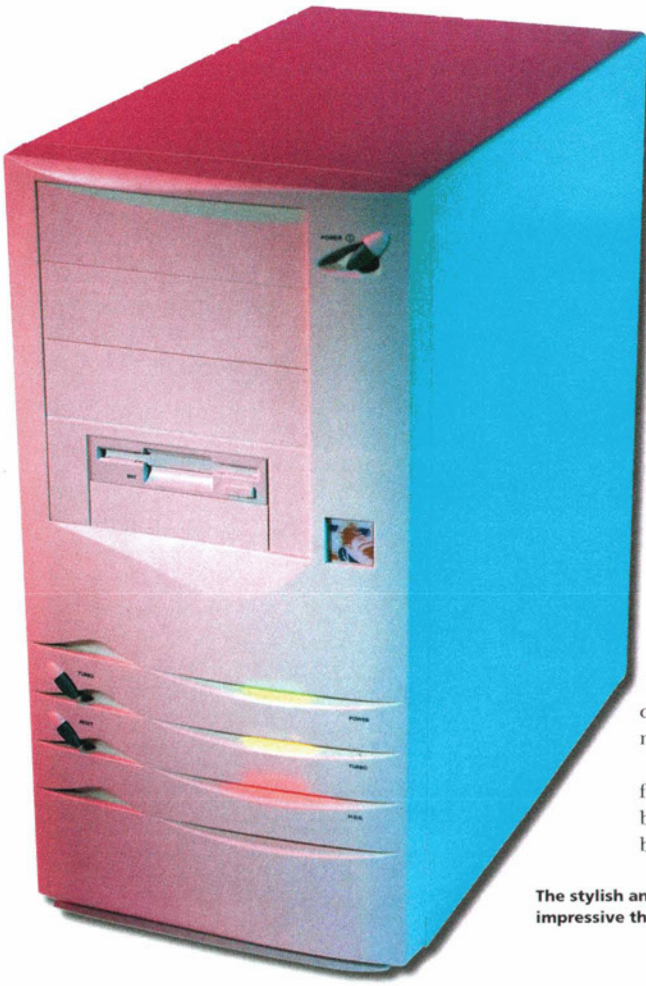
Stick on a CD-ROM drive, a modem, an external hard drive, maybe a Zip, and it doesn't take long before your desktop begins to resemble some sort of industrial cable convention.

And so the tower case was born. But the thing which is deterring most people from house-swapping is the expense and the difficulty as the A1200 motherboard basically wasn't designed to fit inside a tower case.

Most tower systems are designed around standard PC components and boards, which are much squarer and, rather bizarrely for the PC market, do actually follow some sort of convention.

This means that the average Amiga user has to resort to DIY to fit an A1200 into a tower case. It isn't impossible, as we showed you back in *AF99*, but many people would rather not have the hassle of "altering" the case in order to get it to accept the Amiga.

Well, there is now an answer. Power Computing's effective solution to the problem is a tower case with a sidewall panel specifically designed to house the Amiga motherboard.



The stylish and durable Power Tower. Looks more impressive than your standard A1200, doesn't it?

This makes constructing the Tower a lot easier, and it provides a simpler and more effective way of adding extra bits and pieces. As the Amiga is on a panel, you can take it out by just undoing a few screws.

It isn't the first time someone has tried this approach. MicroniK have been offering tower systems for some time now. Unfortunately, the beta model of the MicroniK tower system we saw had some problems, not the least of which was that it was made out of clip-together ABS plastic – once it had been taken apart a few times the sides began to bend and it didn't hold together too well. In terms of build quality, the Power Tower wins hands down with its steel chassis and panels.

The front panel is also very attractive, much nicer than the angular and box-like PC-style tower cases you will normally come across. It has a rather stylish LED cluster, where the LEDS shine down from a recess onto a curved part of the case, creating a really nice glow effect.

Aside from the power switch, the front panel is also home to a reset button and a "turbo" button. The reset button can be wired up to actually soft

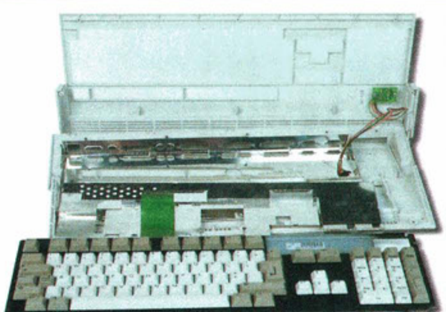
CONSTRUCTING YOUR TOWER

In an effort to convince you of just how easy it is to rehouse your Amiga into the Power Tower, here is a quick guide to the steps involved. It really is exceptionally simple, and you don't need to know anything about electronics, structural engineering or anything – if you can manage to stick a few bits of Lego together, you can probably manage this.

The first, and most unavoidable, step is to rescue your A1200 motherboard from the claustrophobic confines of its case. This is more fiddly than difficult. Take all the screws out at the back and lift the lid off, disconnect the LED wires and the keyboard and there you are.

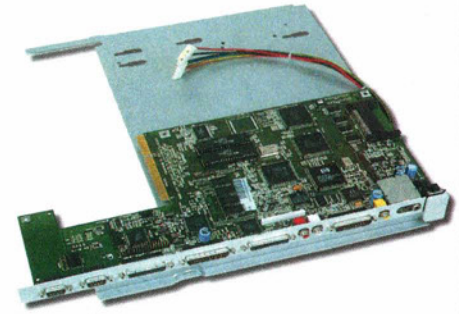
The tricky bit is getting the shielding off. This requires a pair of pliers and a steady hand. The metal tabs are quite fiddly too.

Once you have removed the shielding,



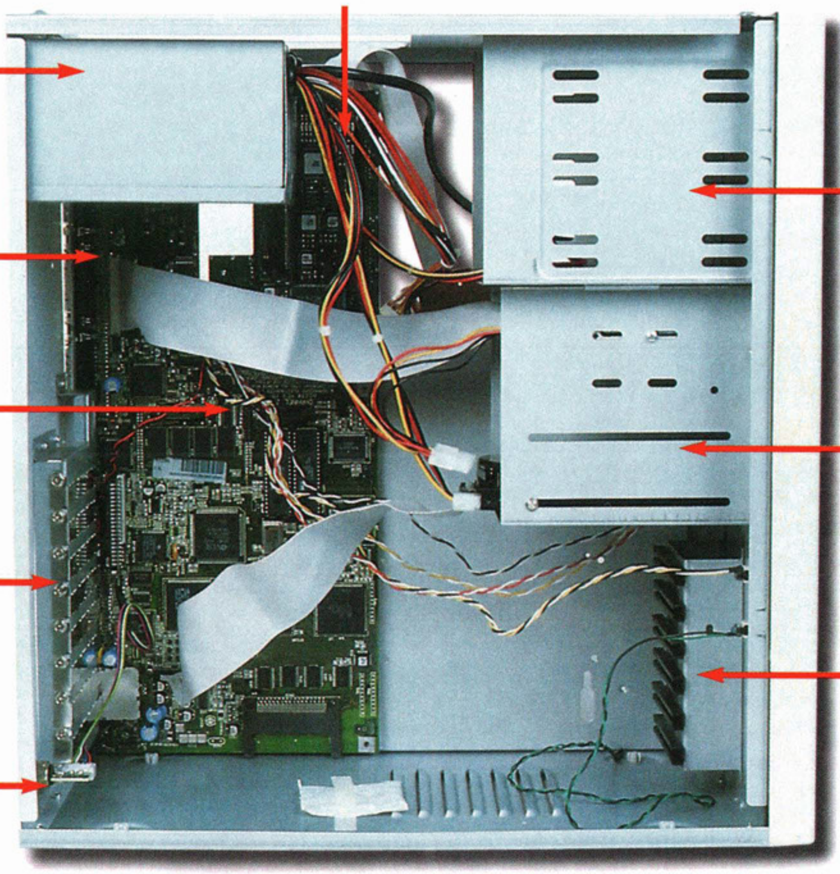
unscrew all the little hexagonal nuts which secure the port and then lift the motherboard out of the case.

The lower shielding and the sheet of plastic protective insulation should easily come



off, and then you are left with just the bare motherboard. This is then fitted into the specially designed and pretty sturdy side panel of the case which will be its new home. A bar at the rear has cutouts for all the A1200's rear

How it works



reset your Amiga, but this means soldering the supplied jumper pin to your motherboard. As you can soft reset using the keyboard anyway, there probably isn't too much use for this, but it's nice that it is wired up and ready to go should you want it.

The turbo button drives a small jumper socket, so you can actually attach this to some sort of expansion card jumper socket. For example, one which might control Kickstart remapping on an accelerator card, or turn a memory expansion on and off.

A clever microchip controlled interface plugs into the keyboard port on the motherboard to give an external keyboard connection for the rear of the case. At present, Power Computing are selling PC Windows-style keyboards to connect to the tower, but by the time you read this, proper Amiga external keyboards should also be available so you don't have to suffer the indignity of having little window and menu keys instead of the more familiar As.

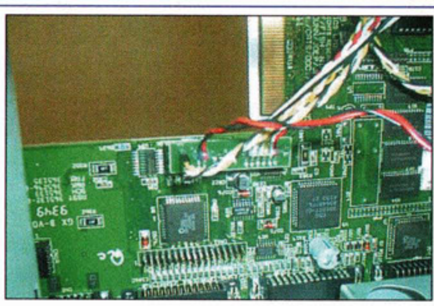
Internally, the tower can provide a home for many extra devices. The most

Continued overleaf ➡



ports, and these are secured with the hexagonal nuts which you removed earlier. A few more connections need to be made to interface the motherboard with the case. A keyboard connector, shown here, is provided.

The power connector is extremely neat, and provides power to the main board from



the Power Tower's own 200W PSU.

A cunning interface links the LED signals from the motherboard to the front panel. You also have the option to connect the Turbo button jumper to some convenient location in order to operate a jumper switch on a drive or on an expansion card.

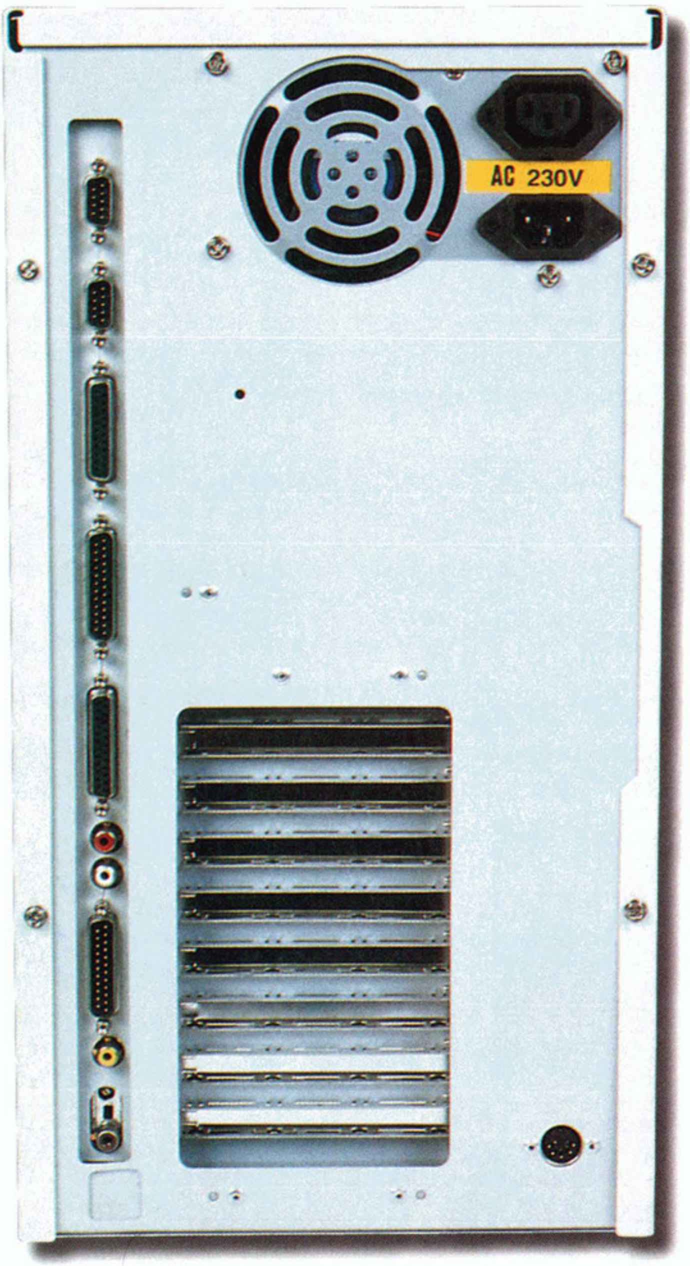


Fit your internal drive in the front panel and secure with a few screws. Mount any additional drives in the ample space provided, hook up to the PSU and you're ready to pop the lid back on. Now that was easy, wasn't it? And look at the stylish result!

ACCESSORIES

Apparently, in the modern fashion world one has to learn how to accessorise, or so my sister says anyway. Power Tower purchasers are lucky then to have so many optional add-ons to consider:

- **4-way IDE connector – for adding two sets of master and slave units.**
- **HDD/CD-ROM Cables – long IDE cables with 3 connectors.**
- **SCSI output panel – for re-routing an internal SCSI interface.**
- **5.25" to 3.5" bay adaptor – convert larger bay to accept 3.5" drive.**
- **Micronik Zorro adaptor – allow MicroniK Zorro to be used.**
- **Power Tower Zorro kit – add Zorro card support for Power Tower.**
- **PCMCIA adaptor – angled to allow installation of PCMCIA devices.**
- **Extra 4x3.5" bay – even more drive bays for additional devices.**



The rear of the Power Tower unit has all the ports found on standard A1200s, so you can still attach modems, printers and other peripherals.

"There are eight blanking panels at the back, so even with a full Zorro system there's plenty of room..."

important is probably the internal floppy drive because you simply can't do without DF0. Thoughtfully, the Power Tower comes with a faceplate for the floppy drive (the drive in your A1200 doesn't have one), so your floppy unit should simply slide into it. This was the only time we encountered a problem as the button for the drive we had wouldn't fit through the hole, because it was one of those butchered PC drives that Escom used in later A1200s. Older drives fit fine and it's not too much of a problem for those of you with Escom machines as you can either get a new button or shave the tapering side off the one you have.

The advantage of the Escom type drives is that they have an activity LED, for which there is a lens on the front panel. The red light on the front of the unit will show any drive activity on floppy or IDE drives, but you can cut a small solder track on the interface so that only hard drive activity is indicated.

The bays provide more than ample room – you could easily get a CD-ROM drive, an internal Zip and two slimline hard drives in the case with room to spare.

If you really need the extra space, you can get a kit to add some more 3.5" bays, but I can't see anyone but the most ardent expansionist needing to do this.

The 200W PSU should be able to power almost anything you can fit in the case with your A1200, but you can easily get a beefier one if its really required. Modern drives and devices tend to consume less power, so this isn't likely.

Of course, you can still clutter up the place with all your other peripherals such as modems and printers, as all of the Amiga's ports are still available at the rear.

PCMCIA peripherals are more of an inconvenience than a problem. A right-angled adaptor is available from Power that will allow you to fit them inside the case. It is also possible to use the MicroniK Zorro board adaptor with this case, although you will need an additional adaptor for this. Power intend to introduce their own Zorro board expansion shortly.

There are eight blanking panels at the back, so even with a full Zorro system there's still plenty of room for mounting external interfaces, including everything from accelerator SCSI cards to CD audio connectors.

It is quite a nice thing to acquire your own case and undertake the necessary modifications to fit your computer inside it. At least it is then unique. However, given the incredible ease of construction, features and value of this system, the Power Tower would seem to be the best route for all those who don't really want to worry too much about the actual mechanics of housing an A1200 in a tower.

It's neat, it's clever, it's easy to construct and great value for money. It's so good that I have one myself. For the price of a hard drive or a decent sized memory SIMM, your Amiga can have a brand new home and you can say goodbye to all those trailing cables and external device boxes.

I really don't think I can recommend this highly enough. This is the perfect way for your A1200 to start off 1998.

DISTRIBUTOR: Power Computing 01234 851500.
PRICE: £149.99 (including PC keyboard + PSU, Amiga keyboard £29.99 extra).
REQUIREMENTS: A1200.

DESIGN: ●●●●●
Exceptional style and sturdy build quality get top marks.

MANUAL: ●●●●○
Easy step by step instructions.

ACCESSIBILITY: ●●●●○
Assembly is very easy.

FEATURES: ●●●●●
Flashing lights, curvy panels, sturdy walls, huge bays – it's got it all...

VALUE: ●●●●●
Outstanding value.

OVERALL VERDICT:
I can't think of a single good reason for any A1200 owner not to buy one.

97%

OXYPatcher

AMIGA GOLD FORMAT

Simon Goodwin tests the commodity that rewrites applications for a much improved performance on 68040 and 68060 processors!

OXYPatcher boosts the performance of old software on Amigas with modern 68040 or 68060 processors. It detects attempts to use obsolete instructions and replaces them with routines that make better use of the new chip.

The drive to speed up the 68k series meant that some instructions fell by the wayside. In particular, the built-in floating-point units of the 68040 and 68060 lack many of the more fiddly instructions available in 68881 and 68882 maths co-processors.

The 68060 is also missing some extras that arrived with the 68020, including 64-bit multiplication and division operations. One instruction that dated back to the original 68000, MOVEP, is also missing. This was meant to simplify interfacing to old eight-bit hardware, but has since been put to other uses by ingenious programmers.

Motorola reasoned that it was more important to speed up the core instructions, used by the majority of programs, than it was to retain support for slow, complicated and relatively obscure operations.

To preserve compatibility, they arranged for the new processors to divert execution to an 'exception handler' when an unimplemented instruction was reached.

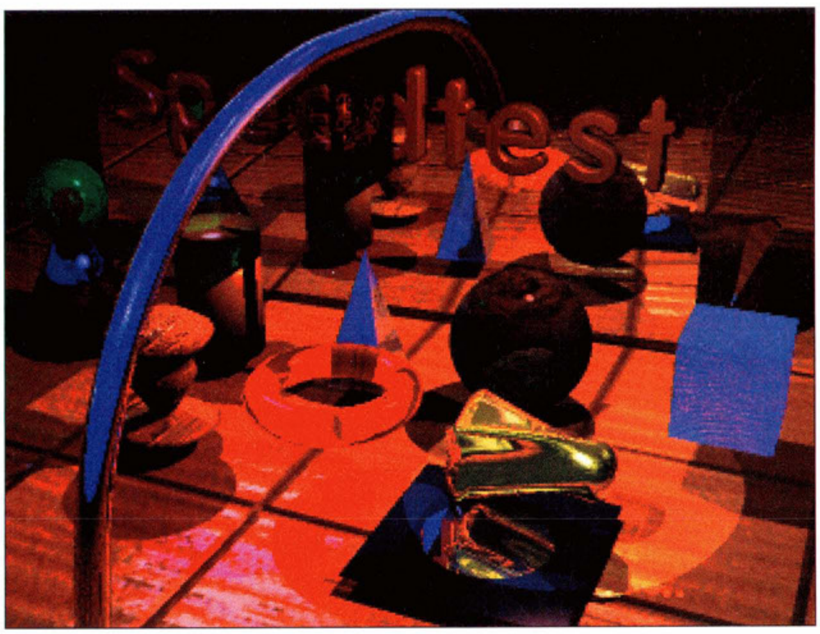
The handler, part of 68040.library or 68060.library, could fill in the gaps by emulating the missing instruction using simpler and faster steps, then restart the main program with the result ready, as if nothing untoward had happened.

This works. Indeed, library code can generally do the job faster with a succession of simple 'RISC-like' instructions than old chips could manage with their many-staged microcoded implementation.

However, the exception handler itself imposes a further delay. It takes time for the handler to get started, work out which instruction has been intercepted and select a replacement routine. This may take much longer than the replacement code.

Task switching is disabled while exceptions are processed. This disrupts input, making mouse pointer movements jerky if the 68040 or 68060 library is called many times a second, as may often be the case. *OXYPatcher* can eliminate this, making your system faster and more responsive.

> "... if that saves you minutes in each render or filtering operation, it soon adds up to a worthwhile saving."



The Cinema 4D render test.

OXYPatcher is a replacement exception handler which only needs to decode instructions once. It replaces them with calls to a custom-coded routine to do just that job, removing the need for subsequent slow exceptions. At best, when the replacement code is simple and the decoding task would otherwise predominate, patched code can be over ten times faster than the original. More typical speed-ups are in the 30 to 300 per cent range, depending on the exact program. Programs that do not use affected instructions show no benefit at all.

It's impossible to generalise, but most programs compiled into code for an earlier processor with an FPU contain instructions that *OXYPatcher* can boost. The ratio of these instructions to unaffected ones determines the speed-up. Sometimes *OXYPatcher* fixes instructions which are not time-critical, so it reports success without any measurable benefit.

Fractals, 3D rendering and landscape generation programs often use FPU code in a tight inner loop. These benefit most, unless already optimised for 68040 or above. In fact, some supposedly 'optimised' programs like *GhostScript*, still generate exceptions unless OXYpatched! *FractInt_040* uses the obsolete FSUGE instruction and *Mand2000* uses a floating point loop instruction. *Fractuality* benefits with some choices of fractal formulae, as many rely on 68882 instructions.

Some emulators make heavy use of MOVEP, which Motorola eliminated from the 060 set, not realising that programmers find it just as useful when emulating as when using genuine old hardware. *OXYPatcher* makes *PlaySID* and *PC Task 3* much faster and smoother on a 68060.

CYBERPATCHER

phase 5 ship a similar-sounding program, *CyberPatcher*, with their 68060 accelerators, but *OXYPatcher* is much more powerful. The phase 5 program only recognises a few of the thousands of instructions that might need patching as it uses pre-written code for each instruction and addressing mode. Ralph Schmidt periodically updates *CyberPatcher* to cope with new cases, but it has no effect on programs that it is not already primed to spot.

Achim Koyen's *OXYPatcher* generates code on the fly for each case, recognising literally thousands of possibilities. It cheats in rare cases, falling back to the 68060.library for a few tricky values, but it handles the vast majority of problem code itself.

TABLE 1: LIGHTWAVE 5.0 TEXTURES BENCHMARK RESULTS

HARDWARE	SOFTWARE	TIME
Commodore 040	68040.library 37.30	2075
Commodore 040	OXYpatcher 3.12	1671
GVP 2000/060	68060.library 1.2	626
GVP 2000/060	OXYpatcher 3.12	519
Cyberstorm 060 v2	68060.library 40.353	487
Cyberstorm 060 v2	CyberPatcher 1.150	481
Cyberstorm 060 v2	OXYpatcher 3.12	402

Times in seconds, allowing 4,000,000 bytes per segment.

TABLE 2: CINEMA 4D EXAMPLE RENDER TIMES

HARDWARE	SOFTWARE	TIME
Commodore 040	68040.library 37.30	3177
Commodore 040	OXYpatcher 3.12	2741
Cyberstorm 060 v2	68060.library 40.353	2125
Cyberstorm 060 v2	CyberPatcher 1.150	2125
Cyberstorm 060 v2	OXYpatcher 3.12	843

There's an option to disable patching of code that uses values in unclaimed parts of the stack, which could be hit at any time. It is inevitable that such code is error prone, but it is also quite rare.

OXYPatcher is friendlier than *CyberPatcher*, with full Workbench control, reporting exactly what it's done in a neat GUI. Some of *CyberPatcher's* hand-coded routines are marginally faster than *OXYPatcher's* generic code, but *OXYPatcher* catches up by recognising more cases.

It also benefits 68040 users with old FPU code, not just 68060 users. It's strongly recommended for Apollo and GVP 68060 users and it should really be bundled with those boards. However, almost anyone who still runs old programs on a 68040 or 68060 will gain some benefit.

CRITICISMS

OXYPatcher 3.12 was not compatible with *Fusion*. Both required an extra command to be added at the start of your startup-sequence, resetting the machine to a special arrangement of low memory addresses. It seemed a mutual incompatibility rather than a bug in either program, but Achim's latest *OXYPatcher* 3.13 appears to cure the problem at the negligible cost of reducing the maximum number of patches from 2000 to 1000. To support *Fusion 2* and *OXYPatcher*, these two lines must appear before SetPatch in your startup-sequence:

rsrvcold -e >NIL:

openoxypport

Mac applications and system software make surprisingly heavy use of 68882 floating point instructions, 64-bit multiplications and division. *OXYPatcher* seems to benefit the majority of Mac applications when run on a 68040 or 68060 Amiga.

GAPS

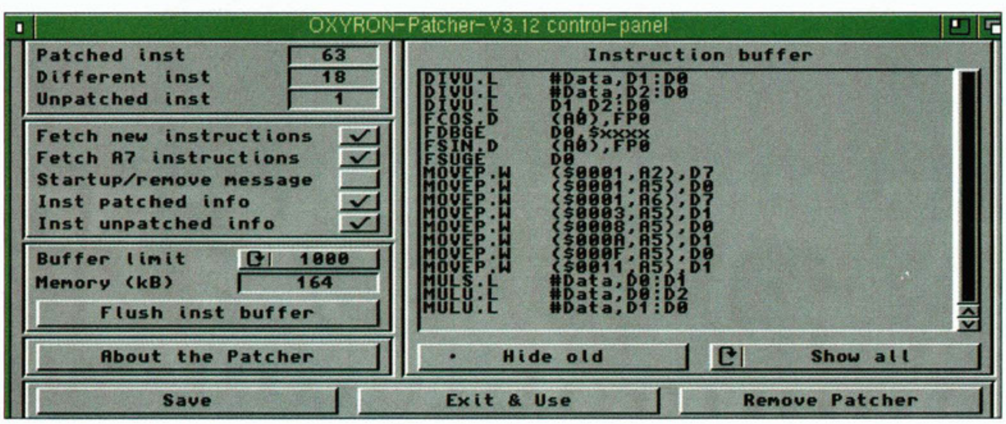
OXYPatcher does not support two 68020 instructions, CAS2 and CHK2. There's no officially sanctioned way to use these on an Amiga, and I'm not aware of any programs that use them. It also lacks support for similarly exotic Binary Coded Decimal floating point conversions. These limitations do not stop programs working as the instructions are handled by the 68060 or 68040 library, but they limit the potential benefit. They seem well chosen because, unless you use these obscure cases a lot in your own programs, you're not likely to notice.

There is one known bug. In rare cases, *OXYPatcher* can stop *Cinema 4D* with an unexpected 'trap' exception. Achim has reduced the risk of this happening, but has not yet totally eliminated it, though it did not show up in all our hours of testing. We found *OXYPatcher* reliable and all the programs we tried worked as before, although many were faster.

As the odd name suggests, *OXYPatcher* comes from OXYRON, a German demo coder group. It is not yet distributed worldwide, though HiSoft have expressed an interest.

At present, it's very cheap but hard to get hold of. You need to send 39 DM (around £13) to an address in Germany to get the software by email, or an extra 15 DM (£5) for delivery by post.

***OXYpatcher's* Workbench control panel.**



VERDICT

OXYPatcher speeds up programs written for old processors, using just a couple of hundred K of RAM, which most 68040 and 68060 users will gladly spare. The benefit on the 68040 is relatively modest, only a few per cent in most cases, but if that saves you minutes in each render or filtering operation then it soon adds up to a worthwhile saving.

68060 users benefit even more. Their processors have more gaps and are faster overall, except in exception handling. When many compilers lack even an option to generate 68060 code, it should be no surprise that their code is less than optimal.

But *OXYPatcher* is really just a stop-gap. It makes old code faster than it would otherwise be, but it's still going to be slower than code properly written for the latest processors.

OXYPatcher delivered an impressive ten times speed-up on a test I had contrived, looping through 68882 instructions. However, when I recoded the program to use the most appropriate 68060 instruction, it was actually over thirty times faster compared to the same processor trapping an exception each time!

OXYPatcher reduces the overhead of emulation but does not eliminate it. If it gives a great benefit, you can be sure of even more by running code properly optimised for your processor. Mileage varies, and if you never run programs that require emulation, *OXYPatcher* won't be of any help to you at all.

In the long run, all programs should really be re-coded to make patches unnecessary, but then, in the long run, we're all going to die! Until then, *OXYPatcher* will hit the spot. AF

DISTRIBUTOR: New Generation Software, Haarmeierskamp, 6 49586 Neuenkirchen, Germany.
PRICE: 39 DM (by email) 54 DM (disk by post).
REQUIREMENTS: An '040 or an '060 processor.

SPEED: ●●●●●
Neatly plugs the gaps in the 68040 and 68060.

MANUAL: ●●●○○
Brief but adequate. Not printed.

ACCESSIBILITY: ●●●●○
One startup command, one icon in WBstartup.

FEATURES: ●●●●●
No real gaps, and a neat interface.

VALUE: ●●●●●
Cheap at the price (if only it wasn't in DM).

OVERALL VERDICT: We should have had this years ago!

95%

X-DVE 3.01

The animation and video effects package reaches a third incarnation and **David Taylor** sees whether the development has paid off.

This package has always been a personal favourite. The improvements that had been made between the first and second versions were substantial, but this new release has not seen the same level of overhaul. This is a shame because there could have been some substantial improvements that would have built on the original program.

Since version 2.5, ClassX have continued to enhance the program, improving the Floyd-Steinberg colour remapping and speeding up the rendering of light source objects. The Emboss effect has been added into the attribute for objects, which works best with fonts to give them the 3D look. This effect is something that ClassX's *FontMachine* program could already do, so it is something of a cross-over of the two programs.

Other improvements include the addition of 12 new slide effects, including some very electrical-looking wipes. The AnimBrush support has also been improved to include the Anim5/Anim7L multipalette format.

However, all of these changes were implemented during the revisions between 2.5 and 3.0.

THIRD TIME LUCKY

This new release includes all of these improvements, but comes with a set of additional features, most notably compatibility with CyberGraphX and DraCO, although I find it hard to believe this is big enough to attract a wealth of new users.

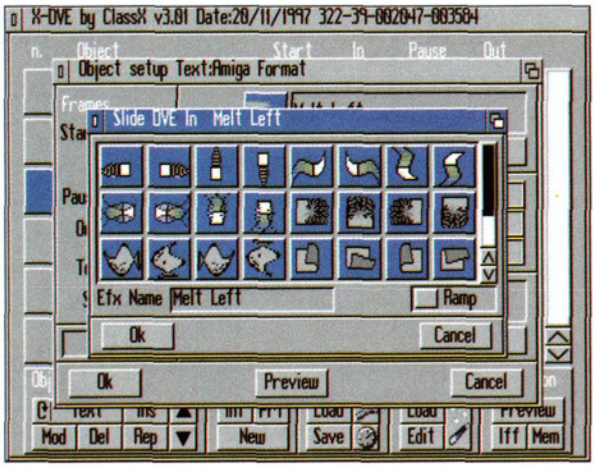
A few minor elements of the program have also been enhanced, including the screen selection for resolution which has a new set of defaults within the requestor. Likewise the effects requestor has been changed to a vertical affair with a description.

The TimeLine Editor has also been improved to allow you to change the positions of objects within an animation without having to go back to the main scripting window. These though are minor enhancements to a GUI which, while effective and very easy to use, could have done with some major improvements. There are changes to the XFA animation format so that it is now independent of screen mode, and the ability to import either IFF frames and convert to an XFA animation or vice versa are both welcome changes.

However, you can't change the frame rate within the program, which is set at 50 fps. A selection of other changes have also been implemented as shown in the changes table.

The problem is that while X-DVE is a powerful program that can accomplish fabulous animations on even a medium powered machine, this has been something of a missed opportunity.

The new slide effects add to an already impressive arsenal of video titling effects, but were added in version 2.70.



> *X-DVE 3 comes as great improvement on the superb X-DVE 1, but something of a damp squib after 2.5.*

"I HATE BUGS"

The program still includes some niggles. They aren't bugs in the sense that they cause the program to crash, but you wish they had been sorted out.

For example, when you select a brush to add in as an object, you can preview it. If you preview an animation from this requestor you can't cancel it until it has played through once, which is annoying for two reasons.

Firstly, the playback can be slow, especially if you have already tweaked the attributes as the program cleverly adjusts these on the fly. Secondly, you are likely to know by the second frame if this is the animation you wanted.

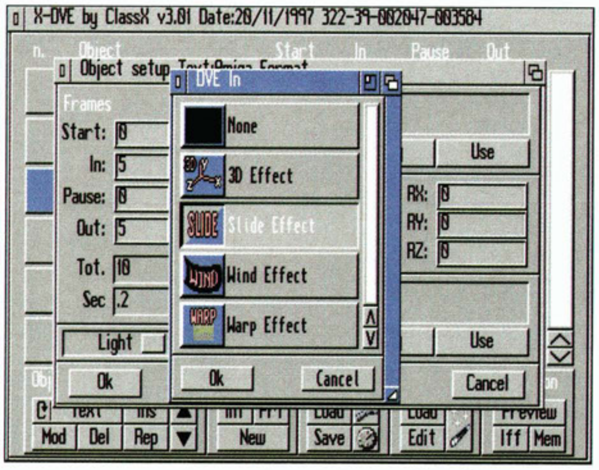
When you choose an object, the filename is automatically added as the object name, but you can then edit this. If you've got the wrong one, and then load a second object instead, the program omits to change the name which the object is given in the script. Then when you look at the script, if you forgot to change the name from that of the first object you tried, you're likely to be a bit confused as the name won't reflect the object.

The preview screen itself has a very dated-looking preview player which should look better and be a lot more responsive to mouse clicks – just try pausing on the frame that interests you.

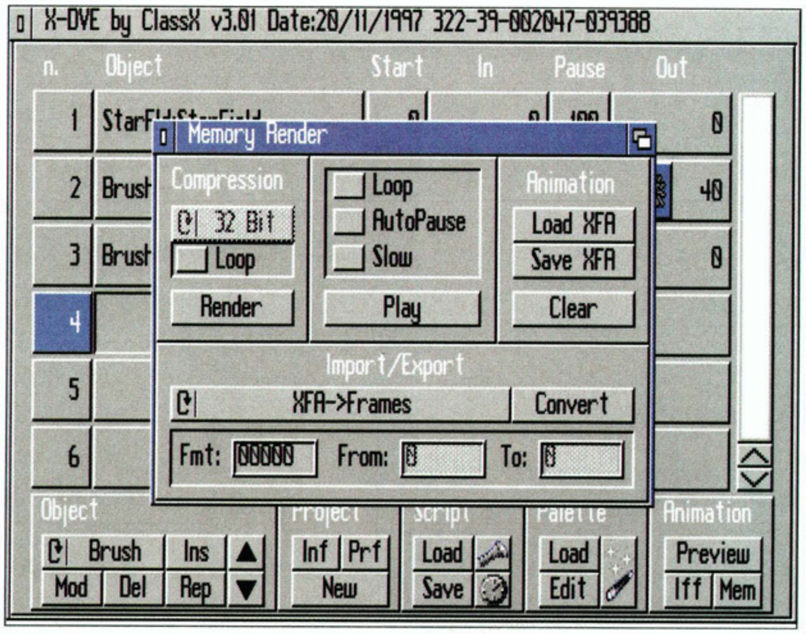
The requestors themselves are frustrating. If you're trying to tweak an

The program now renders the frames faster, includes better anti-aliasing and some new slide effects which look like electrical squiggles and which are not done justice in these frame excerpts.





The effect type requestor has been changed, which is something of a minor enhancement we feel.



The render requestor now includes the ability to convert between frames and XFA animations. It needs some tweaking though.

animation, then you're likely to have one or two key frames that you want to keep seeing, tweaking and re-rendering. However, every time you go back to the render requestor, and this is true of the XFA to IFF conversion requestor too, it has changed back to the defaults. This means you have to switch it from rendering the script to a single frame and re-enter the frame number again. It's unnecessary and if you forget you end up starting a full animation render again that takes a while to cancel.

It would also be nice to be able to set the program to automatically remap all objects and to perform a palette optimisation before rendering. You can do both of these manually by setting the object attribute for each object to remapping and then perform an optimisation, but even having the default for an object being set to fast remapping would be an improvement. At least it would matter if you forgot to do it with one object before you rendered the animation. As it stands, you have to throw it out and start again.

There is an incompatibility with the popular requestor enhancement Arq, which also causes a problem. If you change the position of an object, you are switched to the preview screen to allow you to place the object while seeing how it fits with other objects in the script. This is easy, but with Arq, the requestor appears back on the main X-DVE screen which you have to manually switch to, using the keyboard Amiga-M.

BRILLIANT, BUT FLAWED

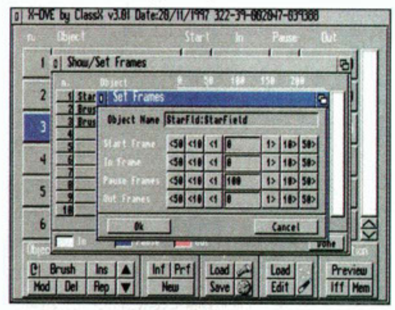
X-DVE 3 comes as a great improvement on the superb X-DVE 1, but something of a damp squib after 2.5. Anyone using anything below 2.5 would be mad not to get this version, but hopefully ClassX, who are committed to continually improving the program, will realise that its success has always been delivering power in an easy to handle GUI. The GUI is a solid base, but it needs more than a few tweaks. Some real new features, like a global preferences requestor for a project, and a more powerful preview with different levels of complexity would make version 3 a much more compelling upgrade.

As it stands, 3 looks much more like a point release than a full number revision – 2.75 perhaps.

ALL CHANGES SINCE VERSION 2.50

Better and faster anti-aliasing process for objects.
Faster Floyd-Steinberg remap.
Faster rendering for light sourced objects.
New "Emboss" effect in the object's attributes.
Script's palette optimisation with automatic attributes remap.
Optimised for Motorola 68060 processors.
12 new slide effects.
AnimBrush object now supports ANIM5/ANIM7L multipalette formats.
Fixed 3D clipping for small polygons (better visual results).
Fixed AnimBrush/Anim handling when loading and saving a script.
Fixed editor screen mode handling (now works with CyberGraphX).
Fixed XFA play (no more trashed screens) when used with CyberGraphX.
Fixed OS2.xx palette bug of the AnimBrush object (multipalette anims).
Fully compatible with CyberGraphX and DraCO.
New screen selection with resolution presets.
XFA animation made independent from screen mode.
Timeline editor with automatic update of graphic preview window.
Selection of the effects with the new icon-selector.
Ability to import/export IFF<->XFA frames sequences.
Update and correction of the Carpet effects.
Fixed a problem with the rotation point in the 3D effect requestor.
Handling of ESC and ENTER keys in palette selector and palette editor.
Fixed autocentering when showing the objects.
Ability to render 256-colours animations with CyberGraphX on NON-AGA Amigas.
Starfield back to "point" stars.
New StarField object: stars can go to any direction.
Fast-Render preferences option (useful for CyberGraphX screens).
CCIR resolution fixed to 688 x 560.
New localised program registration requestor.
Default screenmode set when loading animations using unavailable screen modes.
Fast render preference changed – now CyberGraphX is updated every 'n' frames.
Some English text fixed.





The TimeLine editor now has an extra editing feature for changing the frames of an object without going back to the main script.

DISTRIBUTOR: ClassX & Haage Partner
+49 6007930050 PRICE: TBC
REQUIREMENTS: 2Mb RAM, WB2. WB3, fast processor, RAM recommended.

SPEED: ●●●●○
Very fast, even using virtual memory for larger animations.

MANUAL: ●●●●○
Fine but the new features aren't covered.

ACCESSIBILITY: ●●●●○
Solid and friendly, but let's move forward instead of standing still

FEATURES: ●●●●●
Masses of effects before, so 3 is just slightly better.

OVERALL VERDICT:
A slight improvement on v2.5. A gem of a program, a poor upgrade.

90%

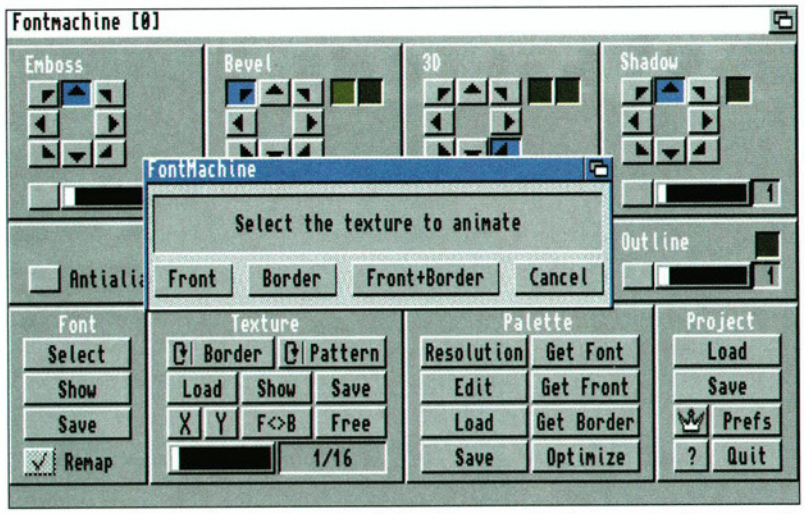
Font Machine 3.03

Font Machine has always been a sister program to X-DVE, adding in the ability to generate colour fonts for use in the animation package. Can version 3 offer substantial benefits Dave Taylor asks?

AMIGA GOLD FORMAT



Font Machine's GIF support breaks the platform barrier and makes the Amiga the best tool for the job, even if it is a specialist job.



The very accessible interface has been tweaked to allow room for the new animation support.

Ironically, although *Font Machine* is seen as second fiddle to *X-DVE* in ClassX's range, it is this program that has seen the better set of improvements. As the program loaded, I wondered whether animation would have been added.

The first thing you'll notice is... that animation has been added! This is important because *Font Machine* is mostly used to generate colour fonts, but few programs on the Amiga actually use that format – in general use, it is only things like *X-DVE* and *Art Effect*.

With animated text saved out in either Anim or GIF format, the program can now deliver images that can be used in other Amiga programs, and generate images for viewing on other platforms. ClassX should look into building AVI support (both import and export) into *X-DVE* to broaden its appeal.

> **The ARexx port of the program can be used to control Font Machine from outside its environment.**

It can use either static IFF textures or animbrush textures, and a very friendly ARexx script handles the animation. All you need to do is answer a set of requestors about the text to animate and whether to animate the front and the border.

The program now comes supplied with a plethora of example projects, sample fonts and textures so you can create the animation that you want within minutes of starting the program for the first time. The interface has seen a bit of tweaking in order to make room for these new features.

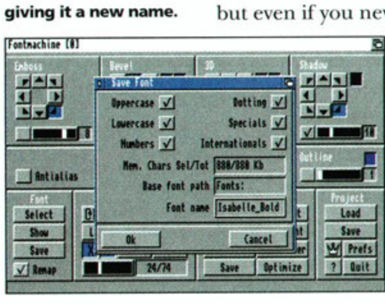
The Save Font requestor can now have a font path entered and the name of the font changed before saving, rather than having to manually do these later. In addition, the Palette button has been moved to the Preferences requestor and renamed Colour Set, instead of being on the main interface.

The Exchange button that transferred the texture from border to front and vice versa has been made a more obvious F>B button. The textures can now be automatically centred horizontally and/or vertically which makes it easier to handle the textures, although it would be even nicer if you could actually use the mouse to click on the point you wanted to be used as the centre on the font.

Like *X-DVE 3*, the program has been re-written to be compatible with the CyberGraphX card. The ARexx port of the program can be used to control *Font Machine* from outside its environment, but even if you never want to do that, the animation scripts alone make the addition worth its weight in gold. Although ClassX are certain to continue developing *Font Machine*, it's hard to think of another single feature that could be added that would be as impressive as the animation. Having used animation packages on different platforms, there's no doubt this is the fastest way I've ever seen to create professional quality text effects.

The Amiga has largely dropped out of professional use in the UK, but programs like this show that it can still outperform the PC. There'll be some text effects appearing on PCs soon that I'll have developed on my Amiga.

The GUI enhancements include better options for saving out your font to a destination and for giving it a new name.



DISTRIBUTOR: ClassX/Haage & Partner +49 6007930050 **PRICE:** £TBC
REQUIREMENTS: WB2 (WB3 and fast processor recommended).

SPEED: ●●●●●
Rendering a whole font takes a while but text animations are quick.

MANUAL: ●●●●○
A clear description. More advice on making animations would help.

ACCESSIBILITY: ●●●●●
The tweaks to the UI are welcome, everything else is obvious and easy.

FEATURES: ●●●●●
The addition of the animation feature opens up a whole new range of uses for *Font Machine*.

OVERALL VERDICT:
The need might be small, but this satisfies that market.

95%

Hydra Ethernet Card for A1200

AMIGA FORMAT GOLD

Got a local network? Of course you have. Well, you could have if you had this card. Ben Vost explains all.

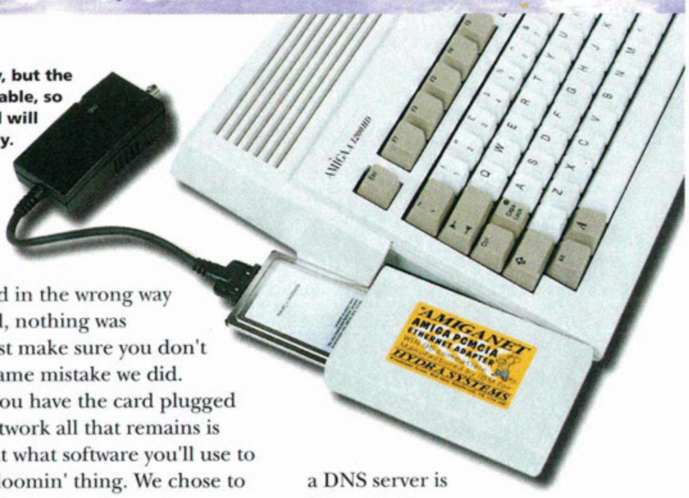
The Hydra Ethernet card for the Amiga 1200 isn't going to suit everyone. For a start you need to have an A1200 (or possibly an A600, I suppose), but more importantly you also need a network to connect it to.

You can choose to either get the BNC (Cheapernet) or the RJ-45-based 10 Base-T (often called twisted pair) connectors to plug into the Ethernet card. The photo shows the BNC connector, but we have a hard time getting that kind of thing to work on our network at Future, so we just emailed Hydra and they happily swapped over the BNC connector for the RJ-45 one.

> *... with this kind of speed, the Amiga becomes an ideal machine for complex network games...*

The card is dead easy to install. You may wonder why you need to have a box on the side of your Amiga instead of just plugging the Ethernet card straight into your A1200. Well, we thought that too, and the answer is that the A1200's PCMCIA port is too variable to be able to guarantee that plugging the card in directly will work. However, you can give it a go should you so desire.

One more niggle with the box – in the manual it says that the PCMCIA Ethernet card will only go in one way, but we found that it felt as though it was plugged in the wrong way up too. Still, nothing was harmed, just make sure you don't make the same mistake we did.



The box isn't absolutely necessary, but the A1200's PCMCIA port is quite variable, so there is no guarantee that the card will work correctly if plugged in directly.

Once you have the card plugged into the network all that remains is working out what software you'll use to drive the bloomin' thing. We chose to use Miami for its simplicity of setup, although the Hydra card is equally suitable for use with a full version of AmiTCP (the one with NetConnect 1 is only for modem-type connections, but v2 should be fine) or TermiteTCP. Miami is nice because it has a dedicated tool to set you up on a network.



The BNC connector – we prefer using the RJ-45, and Hydra had no problems with swapping them over.

If your network uses RARP, then it's quite likely that Miami will be able to work out all the details for itself, but otherwise you'll need to know your IP address, at least one DNS server address and possibly your Netmask value, although the default of 255.255.0.0 is the most common.

All this is made much easier if you've already used Internet software before because you'll already know what a DNS server is (Domain Name Server), so it won't seem so daunting. Unfortunately, because of the wealth of options you have in getting your Amiga onto a network, Hydra Systems have taken the easy way out and only given you a manual for the hardware side of the card. You do get a disk, but that only contains an iconless device driver for the Ethernet card. Even so, Hydra Systems have always been very helpful with technical queries so you shouldn't have too much trouble on that front.

All in all, this is a cracking solution to a problem that most people won't have, but if you do, look no further.

JUST WHAT SPEED DID YOU THINK YOU WERE GOING SIR?

If you're used to a modem as your link to the Internet, and a slowish modem at that, say a 14.4k or a 28.8k model, then the speed at which the Hydra card goes will come as something of a shock. If you think that you usually end up getting about 1k per second for lha'ed files on a 14.4kbps modem, that would mean that it should take about twelve minutes for a megabyte, whereas it would work out at about 6 minutes for the same file on a 28.8kbps modem. On this network card, with a following wind, you might get as much as 500kbps! That would mean a 1Mb lha file might take as little as 16 seconds to transfer between machines.

Obviously, with this kind of speed the Amiga becomes an ideal machine for complex network games – well, more complex than the ones we have right now, like *BattleDuel*.

DISTRIBUTOR: Hydra Systems (01203) 471111
PRICE: £129.95.
REQUIREMENTS: Free PCMCIA port.

SPEED: ●●●●●
You won't get a faster connection to a network or the Internet.

MANUAL: ●●○○○
Some details about software setup would have been welcome.

ACCESSIBILITY: ●●●●●
Plug 'n Play as it should be done.

FEATURES: ●●●○○
Hmm, a connector?

VALUE: ●●●●○
The PC equivalent is expensive too.

OVERALL VERDICT:
The most elegant solution we have seen to A1200 networking.

92%

Zip Plus

Plus? What do they mean Plus? Relax, Ben Vost explains this and tells you why you don't need to worry...

Of course you don't need to worry. The Zip Plus is just an evolution of the gorgeous portable Zip drive we all know and love, based on suggestions from users and magazines around the world. If you want to buy an external unit now, you won't need to worry about whether you get a SCSI or parallel model as it's all the same unit now.

> ...you'll be able to take your drive to unreconstructed PC owners and they'll be able to use your drive and disks...

You won't have to worry about lugging around a huge power supply, or the fact that the power supply may not work in a foreign country. The new power pack copes with AC voltage from 100-240v, and it uses a two-pin power cable, like you're likely to have on your portable stereo.

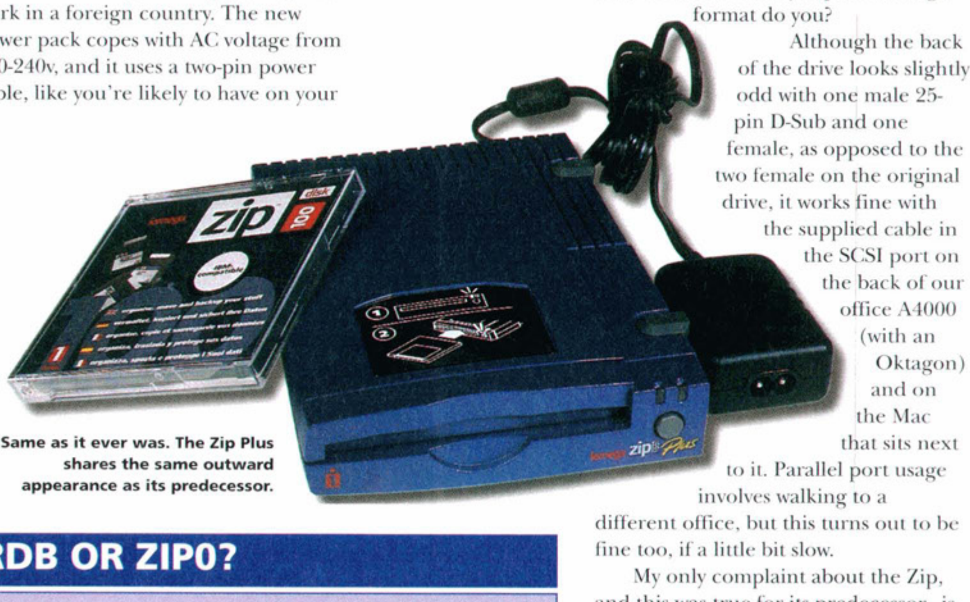
You still won't be able to use the Zip in parallel port mode on your Amiga, but since most serious Amiga owners already have some sort of SCSI controller on their machine, it shouldn't really cause any problems at all.



Although the SCSI port is male instead of female (to cope with PC parallel ports) it works.

It is nice that you'll be able to take your drive to unreconstructed PC owners and they'll be able to use your drive and disks. They'll need to be PC formatted of course, you can't expect PCs to be able to read the vastly superior Amiga format do you?

Although the back of the drive looks slightly odd with one male 25-pin D-Sub and one female, as opposed to the two female on the original drive, it works fine with the supplied cable in the SCSI port on the back of our office A4000 (with an Oktagon) and on the Mac that sits next to it. Parallel port usage involves walking to a different office, but this turns out to be fine too, if a little bit slow.



Same as it ever was. The Zip Plus shares the same outward appearance as its predecessor.

My only complaint about the Zip, and this was true for its predecessor, is that it's much slower on the Amiga than on the PC or Mac. Upping the sector size from 512-byte to 1024, or even 2048, seems to make little difference, but those with other SCSI controllers may have different mileage.

Zips attached to Oktagons or standard A3000 controllers are not going to be the fastest drives in the world, but that hardly matters when you consider the advantages the Zip confers.

Firstly, it's rapidly becoming a standard peripheral rather than the mishmash of formats we were used to in the past. Secondly, it's easily portable and will now work on pretty much any machine, given a free parallel or SCSI port. If you don't want to use the supplied Zip cable, you can use the Zip with pretty much any SCSI cable, but the plug at the end you plug into the Zip will be the wrong 'sex'.

Fortunately the Zip does come with a gender changer to make sure you can make the right connection.

RDB OR ZIP0?

If you have a Zip drive for your Amiga you may well be in a quandary as to whether to use the DOSdriver for it, or just format it using HDToolbox. In my opinion, the latter is the best bet if you're going to be using the Zip disk for yourself or putting it on someone else's machine, since you won't need to carry around a floppy containing the DOSdriver.

However, the DOSdrivers do have their uses, particularly if you receive PC or Mac-formatted Zip disks. The DOSdriver is also useful if you're the sort of paranoid type that wants to be able to use the password protect functionality the Zip comes with. Certainly, if you're going to use the Zip to send us your work to put on the CD, we'd rather you formatted the disk using HDToolbox.

DISTRIBUTOR: Most Amiga dealers.
PRICE: £149.95.
REQUIREMENTS: SCSI controller.

SPEED: ●●●○○
The Amiga needs a faster SCSI controller.

MANUAL: ●●●○○
You won't need to use it.

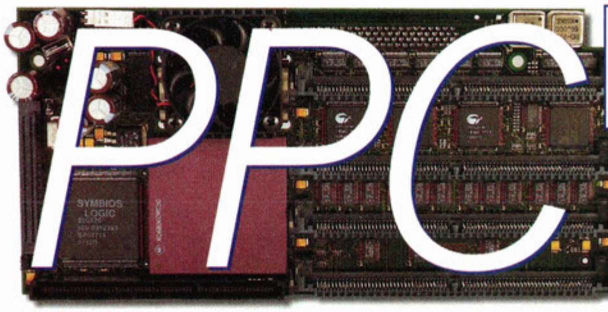
ACCESSIBILITY: ●●●●●
The new version is simpler to use than ever.

FEATURES: ●●●●●
SCSI, parallel, and quieter operation.

VALUE: ●●●●○
VFM and no mistake.

OVERALL VERDICT:
The only choice for a removable media device for all Amiga owners.

92%



PPC Progress

You have to go pretty fast to catch up with the *PPC*. Nick Veitch hosts the first of a regular look into the Powered Up world.

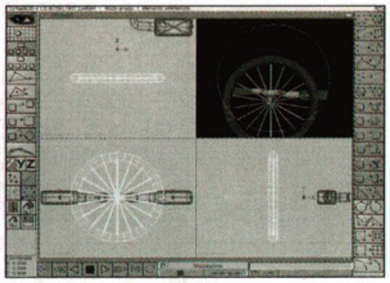


The Power Up board from phase 5 has opened up a whole new world of fast applications, but where will they come from? This is the first in what we hope will be a regular update on software available for the PPC accelerators. If you have a PPC card, then you simply have to read this to find out what great new software is available to you. If you don't have one yet, this might very well be the thing which makes you decide to get one!

Meanwhile, if you are developing a piece of PowerPC software and would like to get it mentioned here, why not drop us a line or email us at amformat@futurenet.co.uk , putting "PPC" in the subject line.

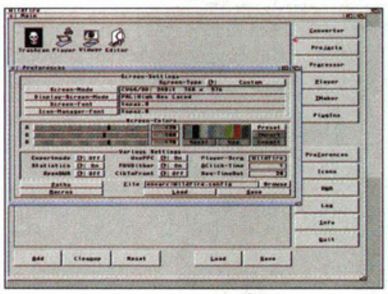
WILDFIRE

Probably the best known application for the Power PC is *Wildfire*, the image manipulation and processing software from Oberland Computer. An alpha demo version of the PPC software was released shortly after the PPC itself.





***Elastic Dreams* (above and top) looks excellent, but these screenshots are all we have to go on at the moment.**



***Wildfire* is now even faster in version 4.43. PPC speeds up most operations by 300-500%!**

This multi-function software may not be the easiest in the world to get to grips with, but once you have got the hang of it you can certainly see the potential. With effect processors such as motionblur, antiquing, embossing, posterising plus 2D and 3D motion effects like pixelise, scale, twirl, wave and so on, this software is very handy for desktop video and presentation work.

As you can easily enable or disable the PPC processor, it is easy to determine exactly what sort of difference it makes – on average, effects are four times faster than with a standard '060. The latest version of this software is currently v4.43, and it is worth getting the update as render times are much faster in this version.

STAYING IN TOUCH

Of course, the Internet is a great place to keep up to date with PPC developments. Here are a few useful addresses:

http://www.phase5.de
The home of phase 5, and official news source for the PowerUp PPC.

http://www.haage-partner.com
Creators of *StormC* and *Art Effect*, and authors of the alternative *Warp Up* development software.

http://www.vossnet.de/titanhb/motionstudios/
Motion studios are behind the jolly exciting looking *Elastic Dreams* software.

http://www.powerup.base.org
An independent site run by Anders Johansson. There are plenty of links and information and more content is being added regularly.

http://www.tornado3d.com
Home of the *Tornado 3D* software developers.

ON THE CD

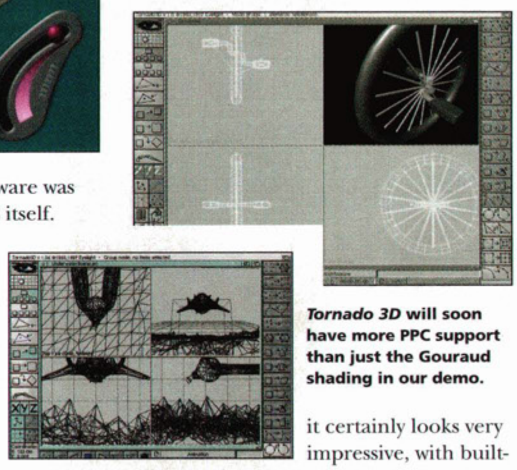


You can find the latest version of Wildfire PPC on our CD this month, and from the next CD, we will be regularly supplying you with all the demos, updates and PPC add-ons that become freely distributable.

TORNADO 3D

You might think that the very last thing the Amiga needs is yet another 3D rendering package, but when you know that this new renderer harnesses the power of the PPC you might be persuaded to change your mind!

Although we haven't had time to properly get to grips with this software, it certainly looks very impressive, with built-in features like inverse kinematics, particle animation, metaballs, real-time shaded previews and so on. The Power PC support in this demo is limited to Gouraud shading, but was included by the authors as a sort of statement of intent as they intend to include a great deal of PPC support in the software.



***Tornado 3D* will soon have more PPC support than just the Gouraud shading in our demo.**

Of course, Impulse (creators of *Imagine*) and Maxxon (who developed *Cinema 4D*) are also planning to include PPC support in the next releases of their software too.

FASTVIEW

Markus Adamski's excellent JPEG viewing software now supports the PPC. This has always been a very fast viewer for JPEGs and now it is even faster thanks to PPC support. Okay, so it may not be as sexy as a 3D renderer or an image manipulation package, but it is a real-world, real-use application which can make all the difference.

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LOYAL UPGRADER

Having been a loyal Amiga owner for nearly 5 years I have decided that it is time to upgrade. I want to buy an accelerator card and memory capable of running programs such as *WordWorth 3* at a reasonable speed, with a sensible number of fonts on screen at once, maybe about 10.

I would also like to run games like *Alien Breed 3D*, *Myst*, etc. The card I have in mind is the Apollo 1230 with 4Mb or 8Mb.

Would this suffice? The reason I chose this card is because it seems to be excellent value for money, but how good is it?

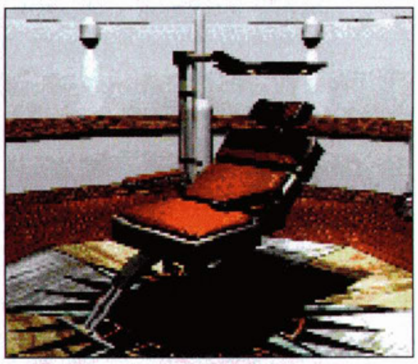
I would also like to add a CD-ROM drive, but external Amiga Drives seem very expensive, so would it be possible to buy a cheap external PC drive (probably Panasonic) and connect that to my Amiga? I'm not bothered about it having no casing as my hard drive runs perfectly well with no external case.

If this is possible then what cables or software would I need and where could I get them? Also, is it true that with 8Mb this card is not compatible with the PCMCIA slot on the A1200? If so, how does this affect the possibility of adding a CD-ROM?

I don't mind having to make modifications to the case or doing a bit of DIY as long as I have instructions as I am quite an experienced user.

Lastly, I am on a low budget and am only looking to spend about £150-£200 on both products combined!

Fraser Thomson
Glasgow





A massive upgrade for less than £200 that lets you smoothly run games like *Myst* (above).

The 1230Lite is good value for money. For under £100 you'll get 4Mb and a faster processor which will make a big difference to your Amiga software. Siren tell me that the 8Mb version will clash with the PCMCIA port. Previously I'd thought this was impossible as the 68030 would deal with the extra memory in a completely different memory map, but if the people selling say it will clash then I'm prepared to believe them.

However, you don't have to worry about the PCMCIA port if you are going to use a PC-style CD-ROM drive. These drives are IDE, and therefore connect to the Amiga's internal IDE interface rather than to a device such as the Squirrel. Eyetech are the people you want to talk to as their buffer card and software should come within your budget.

DOUBLE DRIVE DILEMMA

I have a number of problems that I need help with. Firstly, my system is an A1200 with a 170Mb internal IDE Load drive and a Philips CM8833-II colour monitor.

My system has been transferred to an Infinitiv Tower from MicroniK.

1. I have salvaged a 209Mb (working) internal IDE hard drive (Seagate, the same make as the 170Mb I already have). I believe I need an IDE adaptor to link these drives together. I have heard something about buffered IDE leads. Do I need one of these? And how do I make one HD the master and the other secondary?

2. I have installed the internal floppy drive in the tower. I have an external Cumana drive I want to install as well as the other internal drive from the salvaged Amiga 1200. How do I install all three drives? The Cumana Drive has its own LED to show disc activity but the internal drives don't. How do I get an LED on them too?

3. I intend to buy a CD-ROM drive (cheap) but don't know exactly what I need as far as interfaces, software, drivers and file-systems go. This is to be an internal CD-ROM for the tower.

4. The same question again, but for an internal modem (if possible). I realise I'll have to buy another add-on bay for the tower.

5. Finally, how can I stop the screen flicker on my monitor in OverScan and Hi-Res? I've heard of a couple of PD software things that claim to do this. Do they work and does the screen lose any of its resolution?

Bryan M Scorer
Houghton-le-Spring

1. Assuming both drives are 3.5" devices, you can connect them both to the same IDE interface, one as master and one as slave. A special IDE cable with two sockets for the two drives is used, and jumpers on the hard drives assign the master and slave status.

You'll need the documentation which came with the drives to work out which jumpers do what, and if you don't have the documentation you'll have to contact the drive manufacturers to get it. When using one or more 3.5" drives with the Amiga A1200, it's a good idea to get an IDE buffer card. If one or more is 2.5", then you will need two IDE interfaces. This requires some extra hardware. Eyetech will sort you out.

2. You can install the external drive internally by using the existing cabling, doubled back inside the case. There is no way to install the second internal floppy drive, as it lacks essential electronics for use as a secondary (or tertiary) drive.

If you want an LED from the existing internal drive, you'll have to solder a cable to the miniature circuit board which was part of the original A1200 casing. It carried the floppy disk LED, as well as power and hard drive indicators. You can mount another LED on the tower casing, and connect it to where this LED was attached.

3. You need an IDE/ATAPI CD-ROM drive, some driver software and a suitable buffer. My pals at Eyetech are the people to speak to.

4. There are no connections inside the case for an internal modem and no-one currently makes an internal modem for the Amiga. A2000, A3000 and A4000 owners could use the GoldenGate2+ card to allow the use of PC modem cards, but I'm afraid you are stuck with an external model.

5. They don't work. Or at least, all they do is adjust the colours to reduce the flicker or push the AGA chips to create some alien screen mode. Forget software only solutions and either get a PC monitor which happens to work with the AGA DBlPAL modes or buy an

Continued overleaf ➡

⬅ *external video flicker fixer and a SVGA monitor. Sorry, but flicker fixing really doesn't come cheap.*

TOO HARD FOR YOU?

I have a few questions for you.

1. My hard disk is a tiny, but quite adequate, 60Mb Seagate mechanism, 2.5" internal. Talking with an Amiga mate, it cropped up (don't ask me how) that his bolt-on 540Mb overdrive job could manage an access rate of about 2Mb per second. During a recent bored moment, I used SYSInfo to check my own speed and found it to be a pitiful 300k/s. I know it's small, 2.5" and Seagate, which I once heard described as the cheapest (and nastiest) of cheap disks, but surely this is still sluggish?

Anyway, I have been considering altering the max transfer rate to speed things up a bit, but I wondered if you could give me some idea of safe limits.

2. Searching for some kind of answer to my first question in old issues of *AF*, I found a reference to jumper settings on Conner disks which could be altered to spin them up quick enough for a cold boot to recognise them. I have the familiar slow disk problem and I wondered if Seagate models had any secret tricks up their sleeves.

3. A short time ago I bought a mini-tower from Gasteiner to fit a floppy drive I own and, fingers-crossed, a CD-ROM I will soon own. There is ample power in there for me to power my A1200 too, but I don't want to ruin my leads making the necessary connections explained in your "Tower" issue.

Are there any companies I can blag or buy an unwanted lead from (maybe from an old A500 due to become spares) without having to buy a PSU? On the same subject, where can I hire a multimeter to check the leads?

4. Lastly, I have a Viper MKII '030 (MMU) 28MHz with 4MB SIMM fitted. From day one it has worked, but not exactly faultlessly. There were two problems – it slowed things down and it fought with any reboot, sometimes not letting me reboot and sometimes locking the system during all those checks the ROM makes.

Rebooting a few more times, however, would always get past the lock-up in the end. It became quite a saga, partly owing to the fact that I knew nothing about hardware at that time (several years ago now).

The slow down was because my 2Mb chip RAM couldn't hack the pace. Although this is no longer a problem, the lock-ups still persist.

I use MultiCX 2.55 and have found its "About :Reboot" feature to bypass some kind of call that causes all my trouble, as does a reboot command I have. The board was tested by the First Computer Centre, when I first had the problems, and found to be fine.

The A1200 is also fine without the board and this all happened before I got my hard disk, so I was stuck for an answer and had to make do.

Finally, I have tried unsuccessfully to contact Julien Torres to thank him for his excellent Freeware program, *Ordering*, which I find invaluable.

On that note, and if you are reading this, thanks Julien.

Daniel Pimley
London

1. I think your hard drive is well past it! Consider getting a modern 3.5" mechanism to mount in your tower casing along with your forthcoming CD-ROM drive. It will make a considerable difference to your Amiga. The MaxTransfer setting depends on the buffer size of your drive and you need a calculator with a convert to hexadecimal function to be able to work it out.

2. No, I don't know of any Seagate tricks I'm afraid. Yet again, proof that the hard drive should be pushing up daisies.

3. Amiga power supply leads are very rare indeed. Your best bet is to place an add in a local paper and try to pick up an A500 or A600 PSU (maybe with the computer included) for a few quid. I wouldn't bother hiring a multimeter as they are so useful, and so cheap, you should really buy one.

4. Your 2Mb Chip RAM couldn't hack the pace? I find that hard to believe, and the chip RAM in all the other Amiga's I've used worked perfectly. It sounds like some minor incompatibility between the version of A1200 you have, the accelerator and possibly the hard drive. It happens from time to time, I'm afraid. Try removing your hard drive and using the system from floppy to see if that makes any difference.

NO ADOBE

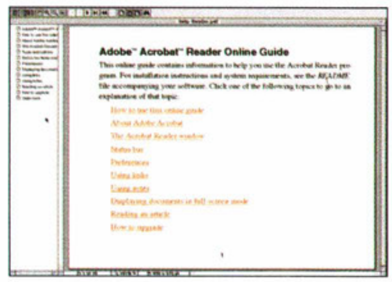
Has anyone written an application or a datatype capable of handling files in *Adobe Acrobat* format? Alternatively, a translation program on the order of *LHA2LZX* would be a great help. I could get by using a good text editor with the appropriate macros, (Cygnus Ed or DME perhaps) but that would be a real pain.

As a long time *BYTE* reader, I would love to access their CD-ROM, both 7-year Archive and Quarterlies. What, if anything, can you offer to help solve this problem?

John W Borland
London

Although Adobe Acrobat *readers for the Amiga don't exist and Adobe themselves are unlikely to be coding one right now, ones written by Shareware authors based upon the Unix PDF port do.*

Try Xpdf *from Aminet, or alternatively, I believe that* GhostScript *has some support*



Unfortunately, you're unlikely to find an *Adobe Acrobat* reader as Adobe use their own propriety information.



INCOMPATIBLE COUPLE?



Are my wife and I finally destined for serious compatibility problems after 9 years of marriage?

I am a follower of the One True Faith (which is why I am writing to you). She, on the other hand, is about to consort with the Spawn of Beelzebub and buy a... well, you can guess what.

The fact is that she wants Internet and multimedia CD-ROMs, and, 9Mb Web browsers apart, there is 10 times the choice of titles for that platform, with things inside which don't always add up correctly.

So my question is this – if she gets a you-know-what, can I, for instance, bang an *AFCD* in its CD-ROM machine and download the Amiga files or programs to its High-Density floppy drive and then gallop off with the floppies to my beloved A1200 (for which I would've bought a High Density df1)?

Will a different platform's software be able to read an Amiga CD, and if it can, will it know there are files on it? If it does, can it copy them?

Stephen Chandler
Redruth

No compatibility problems between PCs and Amigas... only between husband and wife!



I advise you seek counselling, will you do that luvvy? Whoops, wrong Agony Aunt mode engaged. Hope no-one spotted it or I might lose my job at the newspapers.

Yes, an evil, stinking PC can read the Amiga Format coverdisk CD-ROMS and any other Amiga programs you might want to insert into its vile heart. The PC can then read them, and copy them to floppy for you. Even better, get the PC to format the disks as Double Density instead of High Density and you can read them without getting a High Density drive for your Amiga.

If you want to make things easier, get a networking program which uses the serial or parallel ports to link the computers together.

***There, now buy here a box of choccies and she might let you play* Grand Theft Auto.**

A Quick Guide to...
FITTING A CD-ROM

1 The Amiga can use either IDE (ATAPI) or SCSI CD-ROM Drives.

2 The easiest way to fit a CD-ROM is to buy a SCSI interface (such as a Squirrel from HiSoft, or a plug-in card for some A1200 accelerators) and then plug in a SCSI CD-ROM drive which has been housed in its own box with power supply.

3 The A1200 has a built in IDE interface which can be used with an IDE CD-ROM drive. However, you are advised to fit an IDE buffer card. This is a good way to fit a cheap drive to a Tower system, and squeeze in a 3.5" IDE hard drive at the same time.

4 All Amiga's need CD-ROM filing system software in order to use a CD-ROM drive.

5 An Amiga fitted with a CD-ROM drive can read CD-ROMs for other computers, for example, PCs. However, simply reading the data does not mean the Amiga can run the software.

6 A perfect excuse for using a CD-ROM drive is that you can make use of the excellent *Amiga Format* CD-ROM coverdisks. These are packed with more software than you would have room to store on the floppies. You can also buy Aminet compilations, again, more software than you will have time to look through.

7 CD-ROM drives come in various speeds. Don't waste your cash on something faster than 4x or 8x speed. Let the PC upgrade frenzy crowd worry about that, letting you pick up second hand bargains.



for PDF files. Either way, like most things on the Amiga, you're sure to find a way to get those files going!

THE THICK BLACK LINE

Could you please throw some light on how to set a Commodore monitor up to run in DblPAL mode without the thick black line running down the left hand side of the screen?

I have tried eliminating it using the V-Phase button on the monitor, and this reduces the line but doesn't get rid of it. The monitor in question is a Commodore 1942 model. Since getting it I have always run it in normal PAL because of the black line in the other mode. I don't think the monitor is faulty as it is fine apart from this.

Also, does the quality of the screen picture, text or graphics affect the quality of the printout from the printer?

I am not sure I am getting the best from the Canon printer either. I hope you can help.

Peter Robinson
Lowestoft

You can't get rid of the line, it's a "feature". When the Amiga is using DBlPAL mode, one of the consequences is that some screen modes move around the monitor a bit, often to the extent that no matter what adjustments you make, you won't get rid of black borders.

I did manage to reduce the effect by fine-tuning the monitor driving using the MonEd *program, but even then there was a noticeable band. Sorry!*

As for the monitor having an effect on the print out quality – no, this is unlikely. It's more likely you don't have a high quality, third party printer driver installed. Splashing out on a commercial printer driver package makes all the difference.

OVER THE BORDER

I have recently bought a second-hand Commodore 1200 Amiga. The computer has no extra memory or Chip RAM and no hard disk, it's just a plain Amiga. Almost everything has black lines about half an inch from the top to the bottom of the TV!

The Workbench Screen is fine and so are simple things like *Space Invaders*. Please tell me how to fix this, or tell me what the problem is.

Jethro Holcroft
Ashburton

It's got no Chip RAM? I think you'll find you are mistaken, unless someone has removed the memory from the Amiga's motherboard with a soldering iron, of course. When you load Workbench, look at the top of the screen for the phrase "Graphics Memory". This is the amount of Chip RAM which is installed, probably about 2Mb.

It sounds like you are running programs, probably games, which open a smaller screen than Workbench does. Here's a trick – switch on the Amiga, but hold down both mouse buttons and a menu will appear. Press the Space Bar and the screen should expand to fill the screen.

Now use your Amiga and see if that makes a difference. This causes the Amiga to boot into NTSC rather than PAL mode. If your TV can cope, it's a good way to get rid of those black lines.

PRINTERS AND MODEMS

Please can you help me? I have an A1200 with the Desktop Dynamite software, but nothing else. We have just bought a Citizen ABC Printer and have the right leads, so why won't it work?

We would like to boost the memory of our A1200, too. We have no extra memory at the moment.

Should we get a hard disk, extra

Continued overleaf ➡

WHAT MEMORY

My system comprises an A1200, 2.1Gb HD, a Commodore 1085s monitor and an Epson lq-850 printer. I want to expand the internal memory with a view to using my machine to explore the WWW and also for DTP. Now my question is, what form of memory, and how much, do I need?

I see fast RAM and chip advertised. Which one do I need or is it both? Do I need to accelerate my machine as well or will it be able to cope?

I am well impressed with my machine. I started using Commodore computers 19 years ago at school with a PET. I progressed at home to first the C64 then an A500. I upgraded when the Escom stores offered a decent price to do so.

Although I am not as computer literate as I would like to be, I am very happy using my A1200 as a games machine. However, I'd like to take it further. Obviously, a CD-ROM would be great, but funds are very limited so could you advise me on which upgrade would be needed first?

Adrian Latham
Horsham

The A1200 comes with 2Mb of Chip RAM. This is the memory in which graphics and sounds are stored. It's not possible to fit more than 2Mb of Chip memory to any Amiga. Fast memory comes as the memory added via a memory expansion to the trapdoor, or the memory on an accelerator card (a card with a processor faster than the Amiga's native 68020).

For Web and DTP work a fast Amiga is essential, so I would recommend you get an accelerator card with a 68030 processor and 4Mb or 8Mb of memory.



Using the WWW requires a fairly fast processor in your machine, so an accelerator is recommended.

memory or an external floppy drive?

I would also like to get the Internet on my A1200. I have seen an internal 14.4 Kbps modem. Would this give us full Internet access?

I am a complete novice with my Amiga, so I would really appreciate any help you could give me.

Martin Rose
Chatham

You need to install the right printer driver software for the Amiga to be able to communicate with the printer properly. Try calling Wizard Developments and ask them about their Turboprint 5.

A hard drive won't give you extra memory, but it does speed up all that loading from floppy disk. If you want to get online it's pretty essential, so add it to your list.

An external floppy drive is not really necessary unless you're dead set against fitting a hard drive. Extra memory will speed up your Amiga, even more so if it's in the form of an accelerator.

An internal modem for an A1200? Where do you think you would put it? No, you'll need an external modem. As modems now operate at 33.6Kbps or even 56Kbps, a 14.4Kbps modem should be very cheap, if not actually given away for free.

It will certainly let your Amiga communicate with the Internet, assuming you also sign up with an Internet Service Provider. You'll also need software, but the basics can be obtained for free.

MISSING TIME

My system consists of an A1200 with 8Mb and 33MHz FPU (Siren Software), a 1Gb hard drive and a 4xCD-ROM.

I am unable to set the correct time with time prefs. The clock keeps good time and the date is important because I am running *Money Matters* which needs the correct date.

However, when the clocks went forward in the spring, I reset it, clicked on 'Save' and nothing happened. Also, if I am away from home for a while, it loses the odd minute or two and I can't correct that either.

Another problem I have is getting into most of the material on your discs. As soon as I attempt to install anything I get the message: 'Can't open your tool installer'. This is extremely frustrating, as there seems to be quite a lot of good stuff in there.

What I really need is someone in this area who is a good Amigan and who could probably put me right. I am coming up to 73 so someone of a similar age would help, as we old ones have a bit more patience than some of the younger generation.

I started out with an A600 at the end of 1992 and one of the games that came with it was *Jumping Jackson* which, as its name implies, consists of a jumping man who has to negotiate squares and various obstacles.

He went fine on the A1200 until I fitted my expansion FPU. Now I know I should key in "No Fast Mem", but I can only get into the game by booting up from its floppy. Any advice on this?

D N Wheeler
Worksop

You should be able to change the time on the clock, either from the Shell or from the Time Prefs utility, simply by entering the new value and hitting Save. If this doesn't work, then something really is awry.

Either the real time clock on the accelerator card is malfunctioning or possibly the battery is flat. I think you should ask Siren for their opinion on the problem.

If the programs can't find the Installer, then we need to point them in the right direction. The CD-ROMs have a program called +AFCD_Setup+. *Make sure you run this first. This should update the system to know where to look for the Installer program.*

Failing that, find the Installer program. It will be on your system or on the CD somewhere, so copy it to the RAM disk where most programs should find it.

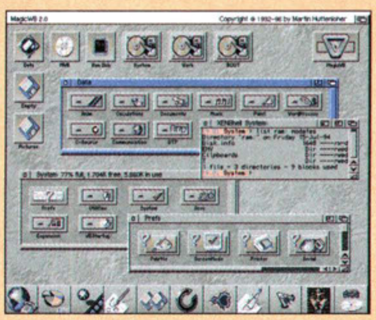
If Jumping Jackson *doesn't like Fast Memory, try using the* NoFastMem *program which appears in the Workbench drawer System. You should see all the extra memory vanish (temporarily of course), ready to run the program.*

Unfortunately, it may be that you need to reset the computer in order to run the game, and so the memory comes back. If so, you need a program called a "Degrader" which allows the settings to survive a reset.

Degraders have appeared on many of our AF *coverdisks in the past, so keep a look out for them.*

ICON SEE CLEARLY..

I have an Amiga 1200, Hewlett Packard Deskjet 540 printer, GVP 1230 Turbo+ with 20Mb, external disk drive, 750Mb hard drive and an external Squirrel SCSI CD-ROM drive. I use Workbench version 3.0 and I am a registered user of both MUI and Magic Workbench. The previews 1 & 2 on MUI, and some magazine screen shots show the opening Workbench screen with the usual hard disk partitions down from the top left hand side of the screen and various, often-used utilities like Directory Opus, 'Iconified' along the bottom. How on earth can I set this up on my system? I would like to have such programs as *Wordworth*, *TurboCalc*, and *Superbase* displayed on startup this way. Please can you help me?



A program like *ToolManager* will let you display utilities like DOpus as icons.

Adrian Bernascone
Shoreham-by-Sea

You want a program such as* ToolManager. *Search Aminet and the PD libraries and you'll find lots of utilities like this.

IF YOU HAVE A QUERY...

At *Amiga Format* we aim to answer as many questions as possible. Unlike some magazines, we don't just concentrate on our areas of expertise – we take on all your problems (as long as an Amiga is involved). Here are a few tips on sending in questions:



Graeme Sandiford

- **Be concise.**
- **Detail the problem as best as you can.**
- **Describe the events that caused the problem.**
- **Give full details of your equipment.**
- **Make sure your question is relevant and wouldn't be more easily solved by contacting the dealer from whom you bought the goods.**

Bear these points in mind and fill in, photocopy, or copy the form below as best you can. Unfortunately we cannot reply personally.

Send your letters to Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Your Amiga:

○ A500 ○ A500 Plus ○ A600
○ A1000 ○ A1200 ○ A1500
○ A2000 ○ A3000 ○ A4000

Kickstart version

○ 1.2 ○ 1.3 ○ 2.x ○ 3.x

Hard Disk: .... Mb

Manufacturer: ....

Extra RAM fitted – type, size, (Mb) and manufacturer:

....
....

Details of other hardware:

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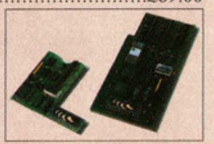
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A1200 with clock, 33MHz FPU and 8Mb .... ~~£80~~ £75
33MHz FPU inc. crystal £15

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(Amiga Format Gold Award for 3.8Gig January 1998)

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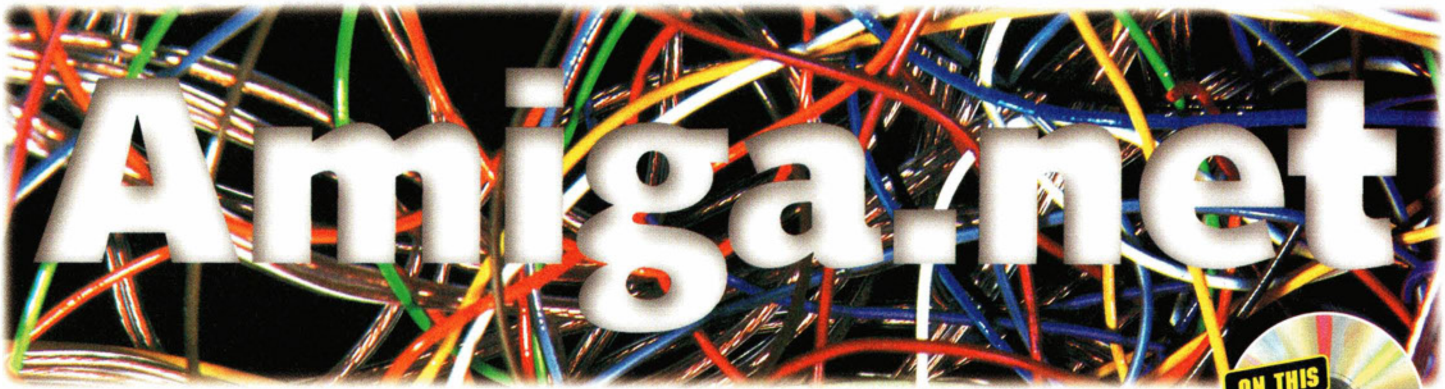
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Amiga.net

Having an email account is practically essential these days. Dave Cusick explains why you don't necessarily have to pay an ISP to obtain one.

ON THIS MONTH'S CD

AFCD23:-In_the_Mag-/Amiga.net

SITES OF INTEREST

Hotmail: http://www.hotmail.com/ RocketMail/
YahooMail: http://www.rocketmail.com/ **or** http://mail.yahoo.com/
Coollist: http://www.coollist.com/
Listing of Free WebMail services:
http://www.geocities.com/SiliconValley/Vista/8015/webbased.html

I have been on the Internet for around three years now, which might not sound like a particularly long time to the really old Net hands out there, but it still makes me something of an old-timer.

I first got on the Internet because I had been working on a magazine exploring the best and worst aspects of a relatively recent development called the World Wide Web for several months. This had fired my interest in the Net at a time when the mainstream media had not really picked up on the possibilities it presented, and the consequences for society of its increasingly rapid expansion.

As I write this article, on a dark Monday evening in early November 1997, I'm actually quite astounded by the changes that have taken place in the on-line world during that relatively brief period. Three years ago you could have typed "football" into the then-fledgling Yahoo and it would have turned up twenty or thirty American Football sites, most of which didn't contain much beyond "Hi, my name's Hank and I support the Dallas Cowboys, here are their results from last season".



Even if you've got your own email account already, there are plenty of good reasons to sign up for another with a company such as Hotmail.

Nowadays, type "football" into Yahoo UK and you'll have scores of soccer scores and reports available within seconds. I first heard about Princess Diana's death during an IRC conversation in the not-so-early-hours of Sunday 31st August. This very afternoon, Judge Hiller Zobel decided to reduce Louise Woodward's conviction from Murder Two to Manslaughter and he announced that decision over the Internet.

> Following on from the success of WebMail, a new, free, Web-based Mailing List service has appeared...



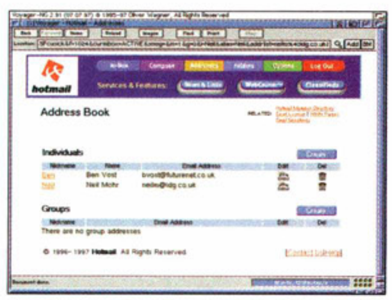
Once you've logged in to a WebMail provider, a simple toolbar enables you to perform standard email operations.

In effect, the Internet has already become the ultimate communication medium. There's also a lot of money to be made out of it and, perhaps surprisingly, companies are finding ways to make money without actually having to charge us, the consumers.

Whereas three years ago I set up my first Web site on free server space at Lookup.com, nowadays there are all kinds of other free services available for the budget-conscious Netizen – particularly where email, the single most popular tool available in the online world, is concerned.

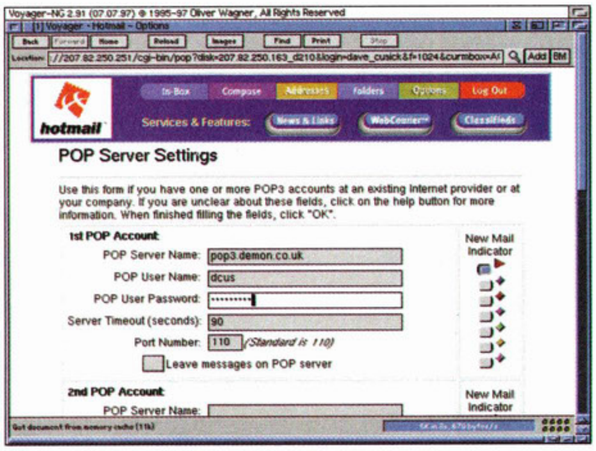
Several companies such as Bigfoot offer fancy email addresses along the lines of your.name@bigfoot.com. It won't cost you a penny to obtain this sort of address, but the problem is that you need to already have an email address because all Bigfoot do is redirect all the mail addressed to you which they receive. This is just a mail forwarding system and nothing more.

Seasoned surfers may well have received an email from someone (probably an American!) with the same surname as them offering them an address of you@surname.com, which of course would be another example of a mail forwarding system.



With features like an address book, Hotmail provides everything an ordinary email client could offer.

Quite apart from the fact that an address such as dave@cusick.com looks a lot nicer and more professional than the sort of email address commonly issued by some companies, universities and ISPs (the old Compuserve 123456.1234@compuserve.com address format springs to mind), there are some distinct advantages to be gleaned from using an email forwarding system. Imagine for a moment that you're fed



An obvious benefit of WebMail services to existing email account holders is the possibility of checking your POP3 account from anywhere in the world where you can obtain access to the Web.

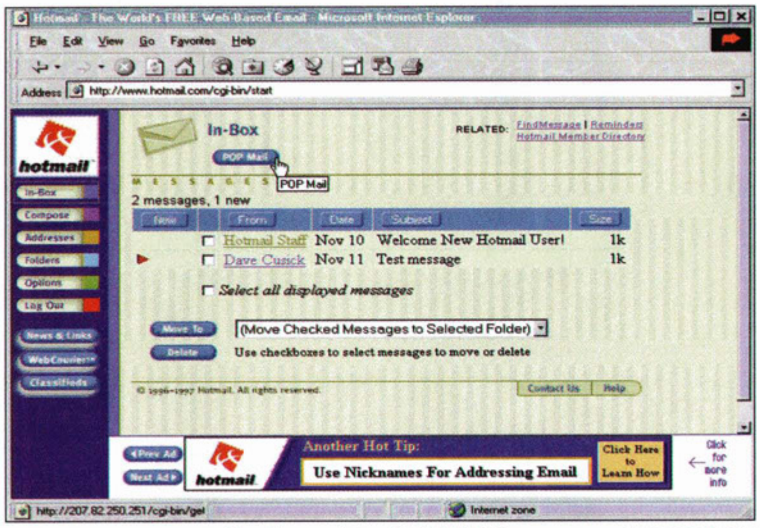
up with your ISP. Changing ISPs means getting a whole new email address and having to tell everyone who might need to email you that your address has changed. If you used a forwarding service, the only person you'd have to tell about your new actual email address would be the forwarding company, because everyone else could still use your stylish email address, which would have remained unchanged.

If you already happen to have a nice email address then you're not really going to be interested in a forwarding service, and they are of absolutely no use if you don't already have an email account. However, recent developments have made it possible for you to send and receive email without you needing to have a full, "proper" email account with an Internet Service Provider or your company or university.

Obviously you will require some kind of access to the Internet, but this access need only be to the Web rather than being a fully fledged Internet account. There are plenty of places where you can get this type of access. A trip down to the local CyberCafe once every week could suffice, which certainly makes this option cheaper than buying a modem and shelling out a monthly subscription to an ISP and a fortune in telephone bills to BT.

Getting an email account needn't cost a penny if you have access to the Web at work or at your school or college. If you do already have an ISP account, by getting an extra Web-based account you can to check your email whenever you can get on the Web, without having to configure an email client to access your POP3 account.

What we're talking about here is WebMail, and WebMail services are springing up all over the place these days. The companies that provide WebMail services don't need to charge customers for the service they provide because they fund their operations through advertising revenue. Their sponsors get to either display banner advertisements on the WebMail company's Web site (which obviously all users of the service are going to see quite frequently) or append two or three line advertisements to the end of emails sent using the system.



Once you've registered you'll be able to check your email easily on any machine with Web access, whatever operating system and software it happens to be running.

Probably the two most popular WebMail services at the moment are Hotmail and RocketMail, the latter of which has recently merged with YahooMail to become YahooMail.

However, if your Web access is via an Amiga (perhaps at a friend's house, because you don't tend to find many Amigas in the workplace or at universities, unfortunately) then you can forget about using YahooMail. This is because it requires a Java-enabled browser and such a thing doesn't currently exist for the Amiga.

Hotmail seems to work perfectly well on Amiga systems, and of course you could choose either of the two services or indeed any of the many other WebMail services, if your Web access is going to be through a Macintosh or a PC clone. Your decision could well be influenced by the domain name the service can offer (the domain name being everything after the @ sign in an email address), some of which are definitely more desirable than others.

After you've initially registered with a WebMail provider, you can check your mail simply by visiting the Web site and entering your login name and password.

If you haven't checked your mail for a while and you have a lot of messages waiting for you then you might have to wait a few seconds for your browser to download and list those messages. After this you can read, reply to and/or dispose of messages as with any ordinary email program.

With decent WebMail systems you're not deprived of any of the features you would have on hand with a conventional email client. For instance, Hotmail offers an address book system, an email address looking-up facility and a signature appending system, and it also allows you to send and receive messages which have attached files.

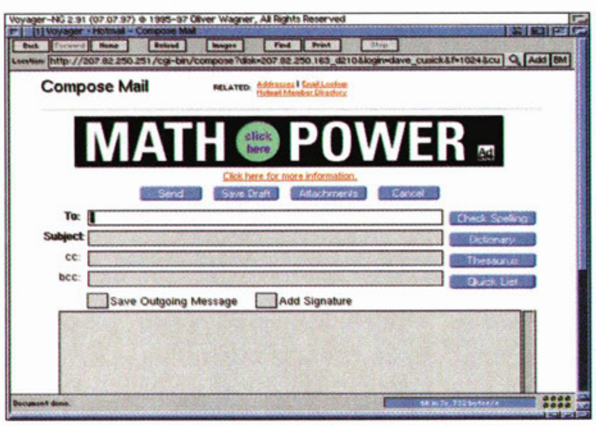
There's a spell-checker, a dictionary and a thesaurus on hand to help you when creating messages; you can block email from people or organisations who regularly send you irritating messages or spam; and you can sort incoming mail into folders exactly as you would with an ordinary mail client.

Since your working environment is effectively an HTML page, you can configure the look and feel of your Web-based email client to a much greater extent than you could with many of the conventional clients, with the possible exception of Amiga MUI-based applications.

Incidentally, going back to the earlier point about WebMail offering universal accessibility without the need to configure an email client, it's possible to check your POP3 account over the Web using Hotmail or YahooMail.

Inspired by this example, some ISPs, such as Demon Internet, are developing their own WebMail systems so their customers can easily gain access to their email accounts even when they're not actually accessing the Internet from their own home.

Following on from the success of WebMail, a new, free, Web-based Mailing List service has appeared in the shape of Coollist. As the Web develops still further and Web access becomes more and more widespread, a greater number of services which previously required separate clients could start being made available via Web browsers. My friends, we live in interesting times.



The message composition page might not be as attractive as that offered by Microdot, but note that a dictionary and thesaurus are available at the click of a button.

CONTACT POINT

I can be reached with comments, suggestions and feedback at dave@dcus.demon.co.uk or via my Web site at http://www.dcus.demon.co.uk/.

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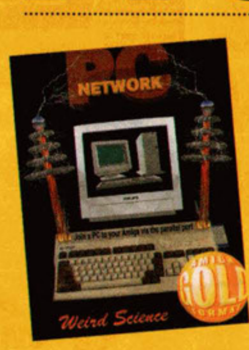
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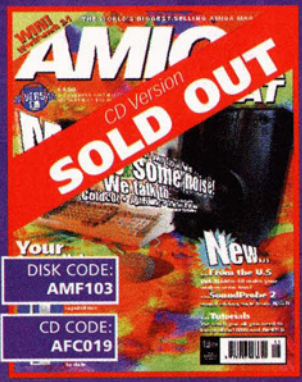
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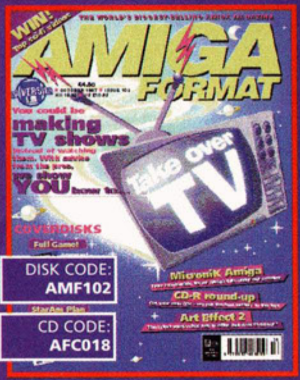


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CREATIVE

The indispensable guide to getting the most out of your software



You ask and we deliver. We had quite a few people contacting us asking how to create AmigaGuide files. Well, it isn't that difficult really, and in some ways it's related to HTML. However, if people are having difficulty with it then we're here to help, so this month we have a one-off AmigaGuide creation tutorial which should sort out any questions you might have.

I hope you have been paying attention to the MUI tutorial! Far too often people ask for various types of programming tutorials that we've already run. Even if you are not thinking of following it through at the moment, it may be worth your while keeping your back issues! This month Chris Livermore is up to some interesting things in his NetBSD tutorial. One of the advantages of a system like NetBSD is that you instantly have access to fairly industry standard applications, a point ably demonstrated by the focus on Internet software in this instalment. Hope you enjoy it!

Nick Veitch

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WE NEED YOUR INPUT.

Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

AREXX
Commodore's excellent decision to include ARexx with Workbench was only matched by their stupidity in not documenting it properly. If you are having trouble why not write to us with a description of what you are trying to do.

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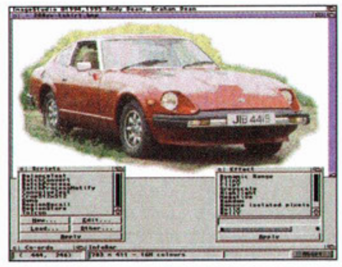
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82 DRAWSTUDIO

Larry Hickmott presents a guide to using *DrawStudio* images in other programs, even on other machines.





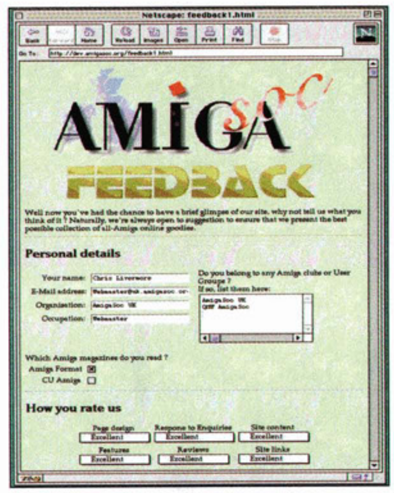
Discover the flexibility and great compatibility of *DrawStudio*.

84 MUI

An introduction to mastering MUI custom classes in part five of our comprehensive series, with **Dr Karl Bellve**.



This custom class example shows you how to communicate between a custom class and other objects.



86 NETBSD

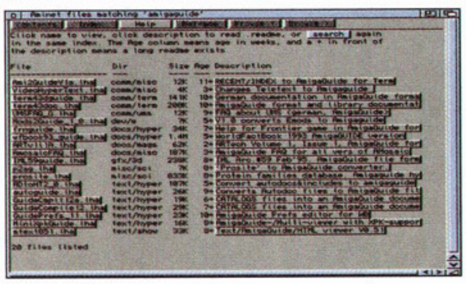
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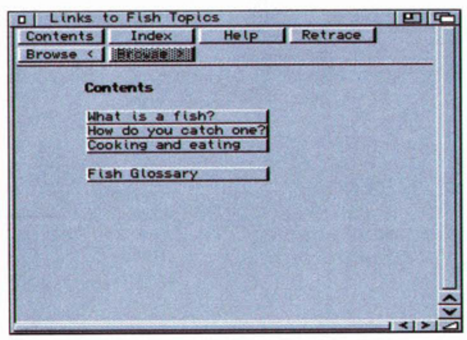


Everything you need to know about getting your Amiga on the net in our fifth NetBSD tutorial.

88 AMIGAGUIDE

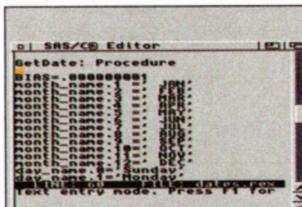
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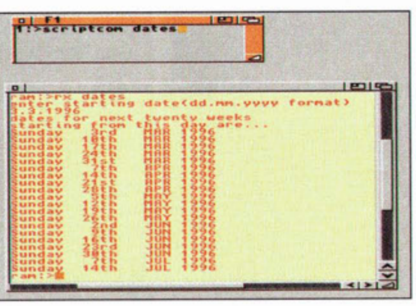




No need to skate around the subject with an AmigaGuide dedicated exclusively to fish.

90 ASSEMBLY





Find out how ARexx sends and receives the right messages with **Paul Overaa's** beginner's look at assembly coding.

A multi-module script that provides pop up console windows running separate tasks.

DrawStudio

Larry Hickmott shares some advice on using images from *DrawStudio* with other applications. AFCD23:-In_the_Mag-/Drawstudio

ON THIS MONTH'S CD

The problem with images from applications like *ProDraw* was that sharing them with other Amiga applications was almost impossible. Thankfully, when Graham and Andy Dean created *DrawStudio* they realised that those using their program would want to use images from it in other Amiga applications and also in programs on other computer platforms.

The proof of how well this all works is that I regularly use images from *DrawStudio* in Amiga applications like *ProPage* and *PageStream 3* as well as *QuarkXPress* and *PageMaker* on the PC.

This guide to using *DrawStudio* with other applications is going to be divided up into two main sections, Importing and Exporting. Within these categories are some tips relevant to programs that fit in to that category. For example, take a look at Importing and you will see a few words on how *DrawStudio* works with *Metaview*.

Contents

IMPORTING FILES

There are two main ways of importing images into *DrawStudio* – opening a file and placing a file. If you want to open a file, it has to be a *DrawStudio* project or a DR2D-IFF file. There aren't many *DrawStudio* format images in the public domain and even DR2D-IFF isn't very popular. WMF and CGM format images are more common. There are gigabytes of these on various CDs or in cyberspace but to use them with *DrawStudio* you'll need a program called *Metaview* by Henk Jonus.

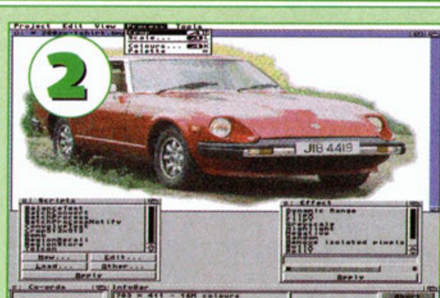
This lets you load a WMF file and save it out as a DR2D-IFF, which can then be opened by *DrawStudio*. *Metaview* supports CGM too, making it essential if you have *Wordworth*. Details of the *Drawstudio* file formats were sent to the

CUTTING AND PASTING INTO DRAWSTUDIO

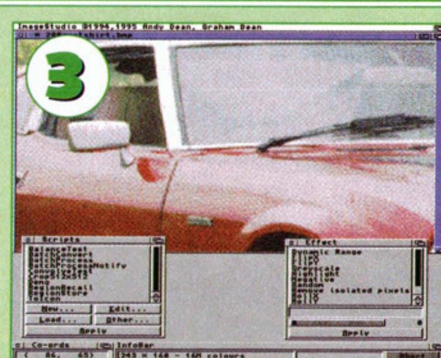
***DrawStudio* supports the cutting and pasting of pictures from a bitmap application to the clipboard and then onto the page in *DrawStudio*. This is how it's done.**



Load an image into *ImageStudio*.



Place the pointer over the image, press and hold down the left mouse button and drag the mouse until you have an area selected. A series of dotted lines will denote the area marked for cropping.



Choose Crop from the Process menu.



Now choose Copy from the Edit menu.



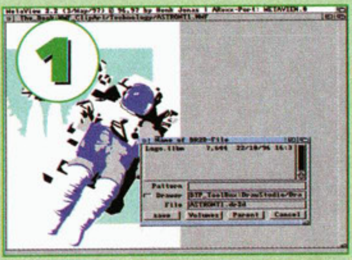
Bring *DrawStudio* to the front and choose Paste from the Edit menu. Your pointer will change to indicate that the image is ready to paste. Click and hold down the left mouse button and drag out an area on the page where you want the image. Release the left mouse button to finish.



Don't forget your image is held in *DrawStudio's* picture buffer even if you delete the picture from your page. This can be confirmed if you choose View Bitmaps from the View menu. Images from the clipboard have the name Clipboard and a preview of the picture can be seen in this requestor.

CONVERTING PICS

The *Metaview* Graphic Conversion Utility by Henk Jonus is an extremely useful utility for converting pictures from one structured graphic format to another.



Run *Metaview* and open a file such as a WMF image. The image will be displayed on-screen. Then choose Save As and choose a file format such as DR2D-IFF which is compatible with *DrawStudio*. Change the extension to DR2D as a little reminder as to what format image it is.



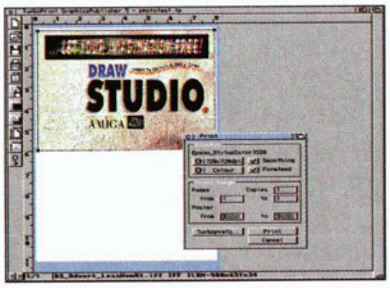
The image can now be either opened or placed on the page in *DrawStudio*. If you use Open a new project will be created, while if you choose Place the picture can be imported into the current project.

author of *Metaview* so in the future you'll be able to load a *DrawStudio* file for conversion to another file format.

USING THE CLIPBOARD

Bringing files into *DrawStudio* can also be done via the clipboard. Let's use *ImageStudio* as an example. You can load an image into *ImageStudio*, select an area, crop it, copy it to the clipboard, then paste that area into *DrawStudio*.

The image can then be used in a number of ways, like pasting it on the page or using it as a fill for structured objects. Select View/Bitmaps to see the images held in memory from the clipboard, and although every image pasted from the clipboard has the same name, there is a preview so you can easily find the one you need.



You can also take pictures from *DrawStudio* and print them from TurboPrint's *Graphic Publisher* or Studio II's picture printing application.

A little tip – after selecting crop and copy in *ImageStudio*, choose Undo and the full image will be restored so you can crop another area and copy and paste that for use in *DrawStudio*.

SHARING IMAGES

DrawStudio allows you to take images and use them in any Amiga application that supports pictures. This is because it supports the Amiga standard of IFF-ILBM as well as many other formats.

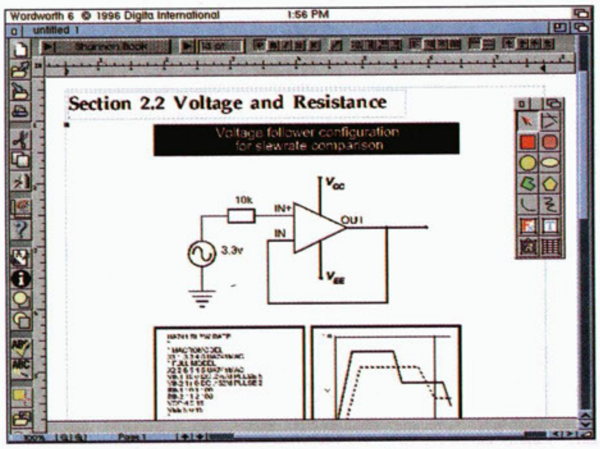
It also supports EPS export, so you can take EPS images and use them in *Wordworth* and *Final Writer*. I don't recommend doing this as there are no advantages in doing so. If you use EPS you're restricted by the type of elements you can have in your image and it will take much longer to print. Export as an IFF-ILBM bitmap and you can use whatever elements you want in your image and it will print much quicker.

The exported image is a bitmap so you can take it and process it even further in programs like *Personal Paint* and *ImageFX*. This was impossible with a file format like that used by *ProDraw*.

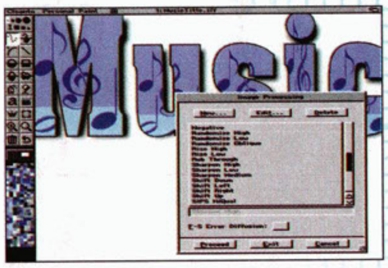
DrawStudio lets you take images back and forth between itself and other graphics applications. No one program can do everything you want so it's important that the ones you do use allow you to bring images back and forth until the desired effect is created.

An example of this is a blurred shadow for text and other objects. *DrawStudio* lets you create structured blurred shadows but I prefer to take a single structured object, convert it to a bitmap, export it and then blur the image in a bitmap image processing program. The picture can then be brought back into *DrawStudio* to be combined with the original text object. I've used programs like *ImageStudio*, *Personal Paint*, *ImageFX* and even *Paint Shop Pro* on the PC to do this.

Sharing files between *DrawStudio* and other Amiga applications is really to be encouraged. Structured file formats are a pain when it comes to using them with many Amiga applications, but with *DrawStudio* anything is possible in the name of creativity!



Just because the images exported from *DrawStudio* are bitmaps doesn't mean you can't print them from *Wordworth* or *Final Writer* and get super quality. This example diagram was exported at a size more than 1500 pixels wide (1-bit) and then printed from *Wordworth*. The quality was as good as you can get on a desktop printer. The secret lies in exporting at a high resolution and scaling (shrinking) the image down in your word processor or DTP package.



Pictures exported from *DrawStudio* can be further enhanced in programs like *Personal Paint* from Cloanto.

WORKING WITH OTHER PROGRAMS

There will be some tasks in *DrawStudio* that you may want to do in a different program, such as the creation of a blurred shadow for some text. Here is an example of just how easy it is to use *DrawStudio* with other applications, even on a different computer!



A clone of an object to be used as the shadow is created and then exported as a bitmap. Make sure to choose a resolution appropriate to how the image will be used when finished. If it's for a web page then it needs to be fairly small (say 400 pixels wide), but if you intend using the text across the top of an A4 page then the size will need to be much larger (about 1200 pixels wide).



A place on disk is chosen to store the picture. In this example, the picture is being saved to my PC's hard disk because I want to show how easy it is to not only share images with other applications but with other computers as well.



The image that has been saved to disk can now be loaded into a bitmap program and blurred. I've chosen *Paint Shop Pro* on the PC, which is Siamesed to my Amiga, but I also use *ImageFX 2.6*, *Personal Paint* and *ImageStudio*. After blurring, the picture is saved to disk.



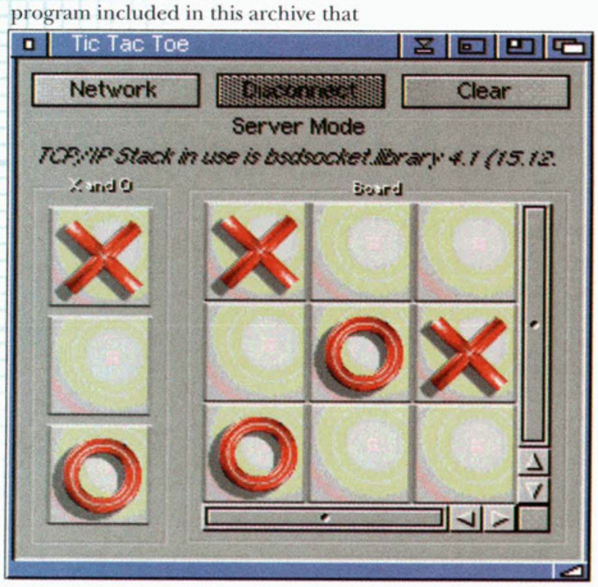
The bitmap is placed back onto the page in *DrawStudio*, arranged behind the text object, and now you have your blurred shadow.

Magic User Interface

Dr. Karl Bellve discusses MUI custom classes in the first of two tutorials covering this subject, allowing you to extend your classes beyond the built-in ones.

MUI has a tremendous amount of power and flexibility built into it. This not only comes from the power it gives the user, but also the power it gives the programmers that use it. MUI allows the programmer to go beyond the built-in classes to design their own classes, extending the functionality of MUI.

This month's tutorial includes a custom class that I have been working on. It is called ImageMap.mcc and is designed to build an image from smaller images. For example, you could use it for 2D adventure games with a map based on tiles, or you could use it for a chess board. The demonstration program included in this archive that



This month's example code uses a MUI custom class called ImageMap.mcc. I use this MCC in a *Tic-Tac-Toe* program that allows you to play across a network.

uses the custom class is just a *tic-tac-toe* game. However, this *tic-tac-toe* is different because it allows network play.

I have included networking code in the archive but don't let it overwhelm you. Just look at the MUI code and the code for the custom class, ImageMap.c. The latest version of all the examples I have talked about, including this month's example, can be found on ftp.us.vapor.com/pub/MCC/ImageMap/. Use your web browser or your ftp client to retrieve it.

MUI custom classes (MCCs) really aren't that complicated when you look at the big picture. First, you need to

Contents

define whether you want to make your custom class private or public. If you want it to be public then you need to follow the general guidelines for a MUI public class. You should retrieve the MCC_Tron archive by Klaus Melchior from Aminet. It is a demo public class that you can use as a guideline in setting up your own public custom class.

Only choose to make your custom class public if you feel a need for it to be used by other programmers and you are willing to document and maintain it. In addition, the example program this month includes my registered public class with an example program that uses it.

There are two packages available to ease the development of a MCC. Klaus Melchior produced an example MCC called MCC_Tron. This package is available on Aminet in /dev/mui/.

Review this archive carefully, especially mccheader.c. You can use this file to produce a MCC quickly without

> *"Only choose to make your custom class public if you feel a need for it to be used by other programmers..."*

re-inventing the wheel. Kai Hofmann also has a package to allow easy development, available on Aminet or at http://www.informatik.uni-bremen.de/~i07m/amiga/mui/MCCLib.html. More information about it can be obtained from Kai directly at i07m@fn.uni-bremen.de.

He also has an installation package for MCCs which I used for this month's tutorial. I use Klaus's mccheader.c but I haven't looked at Kai's version yet. You only need either one of these packages if you plan to make your class public or external to your program.

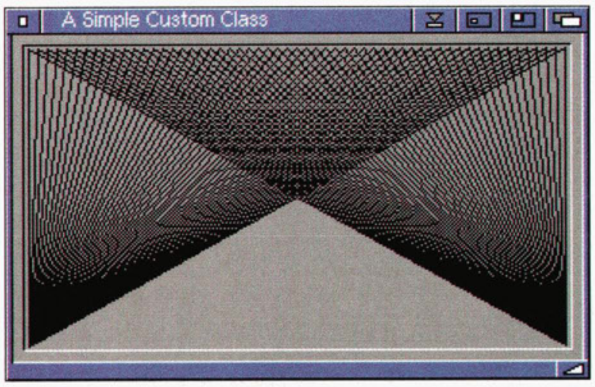
If you intend to make the class internal to your program then you don't need them at all, because these packages are simply designed to make a library out of your class.

The next step in making your custom class is defining method and attribute IDs. All the built-in classes in MUI have methods and attributes defined in mui.h. Each method or attribute ID has to be unique since almost anything in MUI may see them. You do not want some unrelated class reacting on your attribute or method.

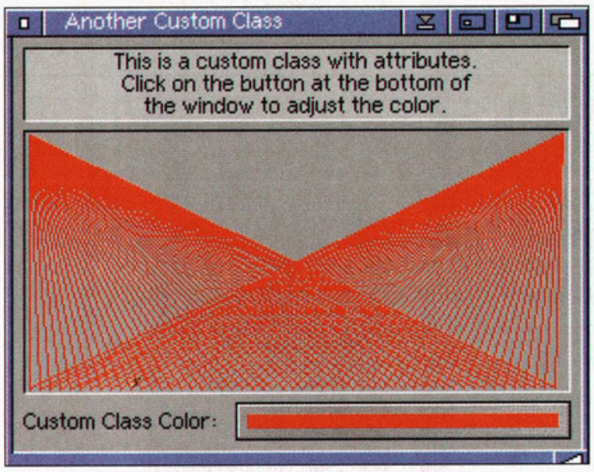
IDs are based on your serial number. My MUI serial number is 5015, which I use as a basis for all my MUI custom classes. IDs are also based upon the predefined value TAG_USER. Here is an example of a method that I have defined for my ImageMap.mcc in the file ImageMap_mcc.h:

```
#define MUIM_ImageMap_CreateImage
(TAG_USER | (5015<<16) | 0x0201)
```

I used "MUIM_" as a root value since it is a method, or I could have used MUIA_ if it was an attribute. As you can see, TAG_USER is defined followed by my serial number. The last number is where you make the ID unique from your own IDs. This one has a value of 0x0201. I am allowed to use any from 0x0001 to 0xffff. Use each value only once. You should never reuse them, even in a different custom class.



MUI includes 3 examples of custom classes. Class1 uses a private custom class that demonstrates simple drawing.



This custom class example, Class2, shows how to communicate between a custom class and other objects. Here, you can change the line colour. This example includes all the basic methods and a dispatcher function.

My class can now react on the method MUIM_ImageMap_CreateImage. Any other class will ignore this method. If you do not have a serial number, or your serial is longer than 4 digits, then you need to get a serial number from SASG (http://www.sasg.com/). Email mccreg@sasg.com for details.

Your class has to be a subclass of another class. Usually it is a subclass of the area class. It could also be a subclass of other classes, like a list class. The provided example mcc, ImageMap.mcc, is a subclass of the area class.

The area class holds information about your object's position, size, weight, fonts and backgrounds. Your class can just worry about doing what it needs to do and leave everything else to the area class. Mccheader.c requires you to define your superclass. In the case of ImageMap.mcc:

```
#define SUPERCLASS   MUIC_Area
```

MUIC_Area has already been defined in mui.h. I also need to define the name of the new class:

```
#define CLASS        MUIC_ImageMap
```

This is defined in my header file that people need to include in their programs in addition to mui.h. It is only a name of a file that MUI will try to load when a program requests your class. Your class will not be loaded if it isn't needed, which is a huge benefit of MUI.

The next step is to open your SuperClass, MUIC_Area. You need to check for failure. For example:

```
APTR SuperClass;
if
(!(SuperClass=MUI_GetClass(SUPERC
LASS))) fail("Superclass for the
new class not found.");
```

Once you have the pointer to your SuperClass, you then set up your private custom class with the function MUI_CreateCustomClass.

```
MyClass =
MUI_CreateCustomClass(NULL,SUPERC
LASS,NULL,sizeof(struct Data)
,_Dispatcher))
```

If this was a public class then you would not pass NULL as the first parameter, but I am just discussing private classes here. The fourth parameter is the size of the internal data of your class. This is private data that MUI will allocate and allow you to access when your class needs it by calling data = INST_DATA(cl, obj). In the example program, you can see that I have defined a struct Data that holds all the important variables that I need. The last parameter is, perhaps, the most important. It is a pointer to your dispatcher function.

The dispatcher function is like a traffic light at an intersection. All messages get passed to your dispatcher function. It then acts upon these methods and passes them on to other functions to be acted upon.

In ImageMap.c I've defined many methods, including the one defined above, MUIM_ImageMap_CreateImage. Once the dispatcher sees this, it passes the message to the function called mMap_NewImage ().

```
case MUIM_ImageMap_CreateImage  :
return(mMap_NewImage(cl,obj,(APTR
)msg));
```

mMap_NewImage then parses the message. That is basically how the dispatcher works. There are a few predefined methods that are sent to it. OM_New is sent to your dispatcher first.

This is where your custom class should initialise any display independent variables. MUI then sends the method MUIM_Setup, where you can question the display environment about things like fonts and screen information. The next method your class will receive is MUIM_AskMinMax.

MUI is asking what the minimum and the maximum size your class can be. If you don't want your class to be sizable, make your minimum size equal to your maximum size. The next important method is MUIM_Draw. This is where your class should draw itself. This is a very important method that I will explain in the next tutorial. MUIM_Draw is the only place where you are allowed to draw. That is all the methods that are sent to your class during setup.

There are methods sent to your class when the window is closed that your class resides in. MUIM_Setup is sent to allow you to de-allocate anything that you allocated in MUIM_Setup. OM_Dispose is sent to allow you to free any data that you allocated during OM_New, which should have been display independent data. The methods will be seen in the following order:

```
OM_New; { /* set up display
        independent variables */
MUIM_Setup;/* set up display
        dependent variables   */
MUIM_AskMinMax; /* give MUI your
        max/min dimensions */
[Window is opened here] {
MUIM_Show; { MUIM_Draw;  /* draw
             yourself */ }
MUIM_Hide; } [Window is closed
here]
MUIM_Cleanup;   /* free any
display                dependent
variables   */
OM_Dispose;   /* free any display
          independent variables */
```

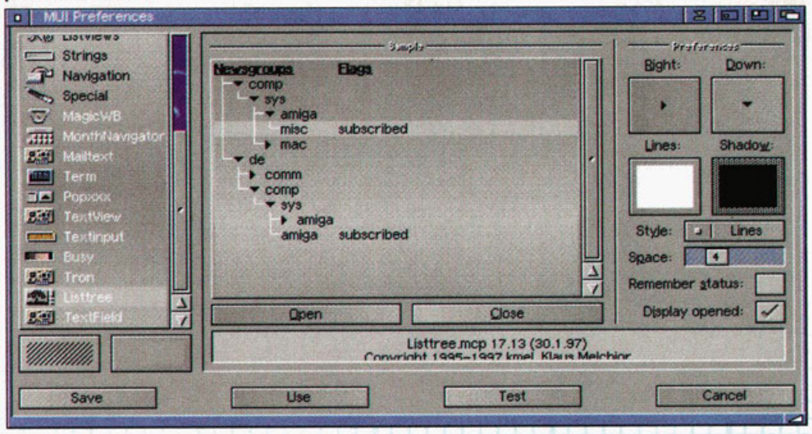
There are two other important methods which haven't been mentioned, OM_Set and OM_Get. These methods allow programs to set or get any attributes of your custom class. These attributes should then be stored in your class's data area.

Once your class has been set up you can treat it just like any other MUI object and add it to your program. I usually create a macro to make adding it easier, like:

```
#define MUIC_ImageMap
"ImageMap.mcc"
#define ImageMapObject
MUI_NewObject(MUIC_ImageMap
```

I can now just add ImageMapObject as a child to any window or group. In next month's tutorial I will discuss each of the above methods in more detail, using ImageMap.mcc as a template. You should also look at the code for the example program provided and read the MUIDev.guide, which actually does a decent job of explaining custom classes.

MCPs are related to custom classes. They control the user preferences for MCCs. The Listtree.mcp shown here, authored by Klaus Melchior, is a fine example of a preference editor for Listree.mcc. To see more MCPs, load the MUI preference editor.



NetBSD

ON THIS MONTH'S CD AFCD23:-In_the_Mag-/NetBSD

Chris Livermore explains everything you need to know about web servers in part five of our tutorial.

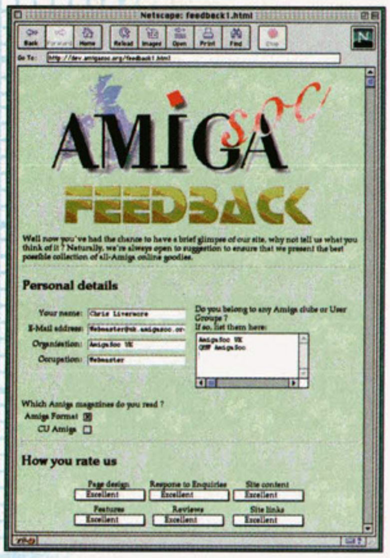
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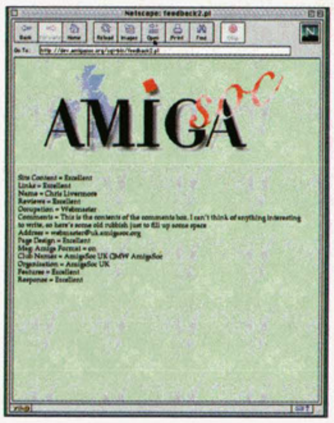
The Internet is one of the areas where Unix still reigns supreme as it was designed from the start to operate over a network, and the most popular web server in use today runs on Unix. According to the Netcraft Survey (www.netcraft.co.uk/Survey) there are almost 700,000 *Apache* web servers, which is 43% of all web servers on the Internet. *Apache* is also free, and the source code is on this month's CD.

You may be thinking, "What good is a web server to me? I don't have a permanent Internet connection." This doesn't matter. If you're thinking of running a full time web server I wouldn't even recommend using your Amiga. A PC with NetBSD and *Apache* can do the job just as well, leaving your Amiga free for bigger and better things!

The most common reason for wanting to install a personal web server is to create an environment where you can develop web sites before putting them onto a "live" server. Simple sites that only contain flat HTML pages do not require the use of a web server, but if you'd like CGI applications on your site then a development server is vital.

CGI is the Common Gateway Interface, a mechanism for running programs on your web server and displaying the output as an HTML page. Uses range from simple random-image scripts to complex database storage and retrieval applications.





The all-important input form (left). Get this wrong and no matter how good your CGI script is your results will be useless. (Above) This is the kind of output produced from the *Perl* form processing script. As you can see, it's important to give each field a suitable name.

One of the nice things about CGI is that it allows you to write applications in almost any language you choose, although most CGI scripts are written in *Perl*. *Perl* is not included as part of NetBSD, but it is available free, and again we've provided the source code on this month's CD. *Perl's* popularity in CGI programming is partly because it is a scripted language so, like the Shell scripts we were looking at last month, you can type in a *Perl* script and run it without needing any compilation.

Perl also includes built-in features found in Unix, including the sed and awk text manipulation commands. It is ideal for processing text documents such as HTML pages. Once you've compiled *Apache* and *Perl* you'll need to configure *Apache* to suit your system and instructions can be found with the source code. We've also included a

> **Uses range from simple random-image scripts to complex database storage and retrieval applications.**

special *Amiga Format* configuration file (httpd.conf), telling *Apache* how to run.

Apache has many configurable options, such as which port to run on (usually port 80), which server name to use and the location of the HTML files. It can also run virtual servers, allowing one *Apache* binary to act as if it were many different web servers.

In our configuration file we've defined a main web server, dev.amigasoc.org, which is where a lot of the CGI development for the uk.amigasoc.org website takes place, and a virtual server, www.wibble.wobble so you can be sure I'm not cheating by showing pictures of real webservers!

Finally, you will need to make sure all the directories mentioned in httpd.conf really exist. The easiest way to do this is to unpack websites.tar into the /usr/local/etc/httpd/htdocs directory. This will create two subdirectories, "amigasoc" and "wibble", containing all the files needed for the rest of this tutorial.

Once you are sure everything is correct you can start the *Apache* web server. The *Apache* binary should be installed in /usr/local/etc/httpd/bin/, but you can change this path by editing the httpd.h file before compiling. If you enter the URL http://localhost or http://dev.amigasoc.org into a web browser running on your machine you should be presented with an AmigaSoc front page, while the URL http://www.wibble.wobble will present you with a Wibble test page.

If you reload the Wibble home page a number of times you will notice that the background and the picture on the page change every time. This is done using a *Perl* CGI script, shown in listing 1. The HTML source code for the page contains references to the script instead of to an image file. *Apache* runs the script and acts upon the output every time you load the page. In

Listing 1

```
#!/usr/local/mbin/perl

@images = split("\n",`/bin/ls -d
../backgrounds/*.gif`);

srand(time ^ $$); $num =
rand(@images);

print "Location:
$images[$num]\n\n";
```

Listing 2

```
@rude = ("Ben","Vost","Nick","Veitch"); $a = 0; while ($a < @rude) { if ($in{message} =~ /$rude[$a]/i) {
&no_message; } $a++; }
```

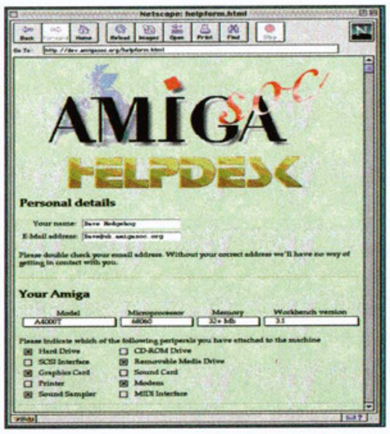
this case our script returns the path to an image file, so *Apache* loads that image onto the web page.

The script itself is quite simple. As with last month's Shell scripts, the first line tells NetBSD which interpreter to use to run the script, in this case the path you've installed the *Perl* binary in. The script then reads the contents of an image directory into an array called "@images" using a combination of the *Perl* "split" and Unix "ls" commands.

The next 2 lines in the script deal with choosing the image. The first line starts the random number generator using the current process id, contained in the $$ variable. If this line was omitted then the random number chosen by the rand function in the next line would always be the same.

Finally, the script has to tell the web server which image to use in the document. The *Perl* script cannot print the image name as the web server won't understand what this means, so it's necessary to print an HTTP header as the start of all output from a CGI script.

The HTTP header contains information required by the web server to deal with the rest of the script's output. With our random image script the HTTP header is "Location: ". If we were using CGI to generate entire web pages we'd use the HTTP header, "Content-type:text/html\n\n" instead.



No matter what the contents of the form, they can all be processed by the same CGI script.

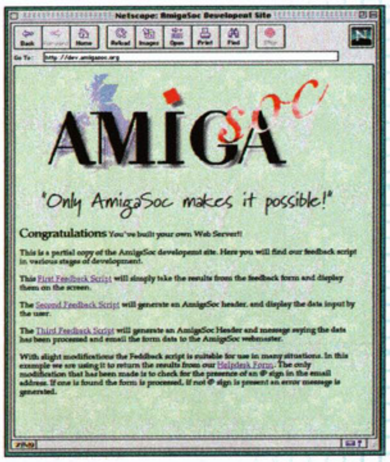
Creating pages that have random elements, like images, may look nice, but it's not the most useful thing in the world to use CGI for. A better use of CGI is to produce web pages based upon some input from a user. Many of the pages on the AmigaSoc website are generated by the response to various forms on our pages that require input, or on other constantly changing data.

The next example takes the output from a form and performs various tasks on it. This script forms the basic engine for many AmigaSoc pages including the feedback and helpdesk forms. The most important job of any form processing script is to store the data somewhere for future reference. To do this, we must first extract the data from the form.

This job is made easy by a set of public domain *Perl* routines. They are all included in the cgi-lib file which must be in your cgi-bin directory for these scripts to work. Cgi-lib takes the data input into the form and presents it in an associative array, a list of data where each data element is referred to by a name instead of a number.

Cgi-lib ensures that the name needed to reference the data is the same name you gave that particular input field on your HTML form. This may sound complicated, but it actually makes programming very simple if you think about the layout of your HTML forms.

Looking at the AmigaSoc feedback form you can see the second input box is for the user's email address. In the HTML source code for the page this



Congratulations, you've now built your very own web server!

input box is given the label "address". When cgi-lib processes the data in the form the value in this field is placed into the associative array element "address". To access the data you refer to the element "address" of the array. Cgi-lib calls the associative array "in".
$email_address = $in{address};

Now that cgi-lib has done the hard work all that is left for us to do with our *Perl* script is generate an http header and an appropriate HTML page.

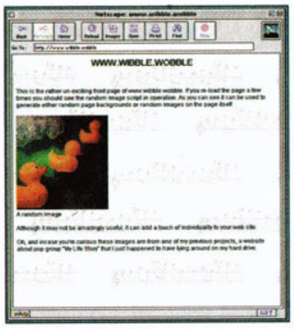
There are three different versions of the feedback script, feedback.pl, on the CD. The first prints the contents of the feedback form back to the user. The second also does this, but includes the AmigaSoc logo and background. The third emails the form data to the AmigaSoc webmaster and creates a confirmation HTML page addressed to the user who entered the data.

Sometimes it may be desirable to perform some kind of checks on the data before processing it any further. Listing 2 shows a pattern-matching function used within the AmigaSoc graffiti wall and classifieds scripts to stop people posting obscene messages. It checks the message for a set of banned words and will generate an error message if any are detected. If the words aren't present then the message is acceptable. These words are unprintable so I've replaced them with some nasty, but printable, "four letter words".

CGI uses environment variables to get information about people reading the page, normally by personalised greetings. As web browsers are getting more incompatible, use of the HTTP_USER_AGENT variable is becoming common, telling surfers to upgrade or change their browser.

Table 1 shows some of the more common environment variables that are supported by most web browsers.

Most of these pages are flat HTML. However, the images are randomly generated each time by a CGI script.







As you can see from the source of the helpdesk form, the name given to each form element in the HTML code is the name you must refer to it by in your CGI script, so choose wisely.

TABLE 1

SERVER_NAME = the server's hostname or I.P address
SERVER_SOFTWARE = name and version of the server software
REMOTE_HOST = the hostname of the client's machine
REMOTE_ADDR = the I.P address of the client's machine
REMOTE_USER = the authenticated name of the user
HTTP_USER_AGENT = the browser the client is using
HTTP_REFERER = the URL of the last page visited

AmigaGuide

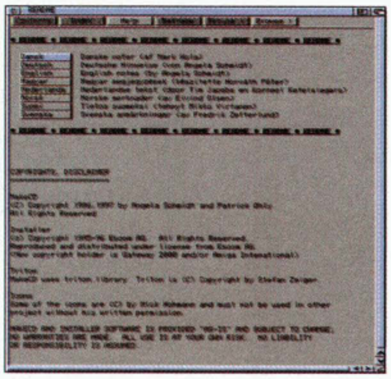
John Kennedy provides a complete introduction to writing your very own AmigaGuides in this special one-off tutorial.

ON THIS MONTH'S CD AFCD23:-In_the_Mag-/Amigaguide

WHAT IS IT?

AmigaGuide is an incredibly powerful document system which has been part of the Workbench since version 2.04.

In many ways, AmigaGuide is like the World Wide Web language HTML, although less trendy.

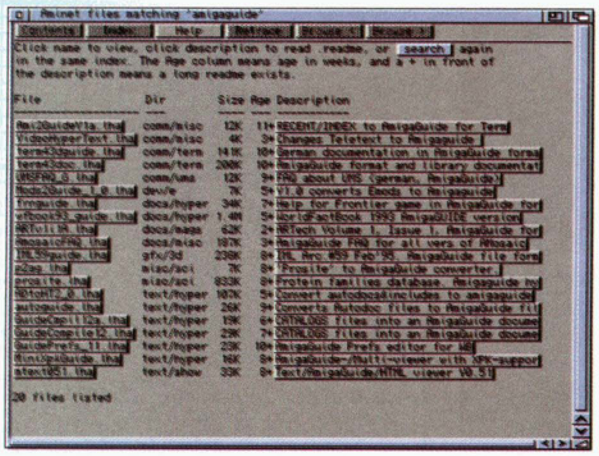


A genuine AmigaGuide file, yesterday.

Like HTML, an AmigaGuide document is a simple text file which needs to be viewed with a proper browser program. Also, like HTML, AmigaGuide files use links to produce what's called hypertext, a document containing links which you can click on to jump from page to page.

AmigaGuide was created to provide a standard format for Help files and documentation. There is nothing worse than trying to use a new program and being confronted with a jumble of words with no index or contents pages.

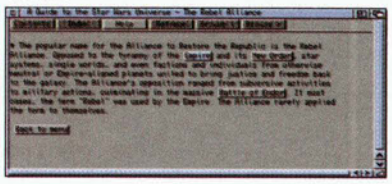
Likewise, from the programmer's point of view, not having to re-invent the wheel with text display programs saves time and effort.



An AmigaGuide file generated "on the fly" by the Aminet search engine.

Since then, AmigaGuide has grown into many other things. You'll find disk and Internet-based magazines which use AmigaGuide for text display. You'll probably have seen AmigaGuide used to display an index to the files on a CD-ROM, or even as the interface in an Internet program such as Gopher.

There are two important ways of flicking through the pages which make up an AmigaGuide document. First of all, you can click on the key-words and phrases which have been picked out as buttons. Secondly, there is a bank of controls at the top of the guide's window. These allow the reader to move back the way they have come, and also quickly go to the main page and the index.



Some people have too much spare time. An AmigaGuide version of Star Wars?

> "There is nothing worse than trying to use a new program and being confronted with a jumble of words..."

HOW TO CREATE IT?

As we've said, an AmigaGuide document is a plain text file, created with an ordinary text editor. It's not a program or application in its own right any more than the source code of a program is an executable file.

There are two things which make it special. First, it contains certain codes or tags which define various aspects of the hypertext facilities. Secondly, the file is viewed by an AmigaGuide browser such as Multiview. It's the browser which takes note of the tags and performs the necessary actions.

The easiest way to create an AmigaGuide file is to use a text editor and start typing. The text in the file – your help file or magazine copy – is interspersed with the AmigaGuide tags.

When you have finished, the file can be viewed with the Multiview program to test it. That's all there is to it. As long as you remember to save the file from your text editor as plain text (not as a word processing file with extra text formatting commands) you won't have any problems.

CREATING AN AMIGAGUIDE DOCUMENT

An AmigaGuide document is based on "pages", and each page covers a specific topic. For example, an AmigaGuide document all about fishing might start with a index page. This would contain links to all the other pages so the reader could click on the topic of interest and jump straight to that page.

Continuing the fishy theme, the second page might be about different types of fish, the third about different baits, the fourth about cooking fish and so on. The fifth page could be a glossary, giving the reader an easy way to look up a particular word or phrase.

Each possible location the reader can jump to is called a "node", and you must define these locations inside the document so that the browsing program knows where to jump to. The most obvious way to use these "jump to node" commands is in the index, which is a list of topics.

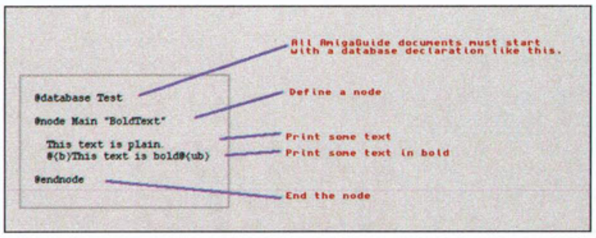
Once defined as a jumping off point, the AmigaGuide browser draws a box around the text to make it look like a button. It should therefore be obvious to the reader to click on the button with the mouse to follow the link to the associated page.

However, it's also common practice to add links to particular words as they appear in ordinary sentences. For example, when discussing the different ways to cook fish you might be describing different cooking techniques. In the description, the word "poaching" might be defined as a jumping off point. When the reader clicks on it, they are brought to another page which explains poaching.

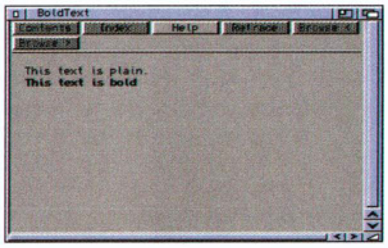
If the reader already knew about poaching, they could choose not to follow the link and so avoid wasting their time. In essence, this is what hypertext is all about.

TAG, YOU'RE IT!

We've already mentioned tags, the special codes which the browser uses to mark out special AmigaGuide functions. Here's an example of a tag which makes the text appear as a different colour for effect. It's the Bold tag, and it looks like this:



(Fig 1) Here is the plain text file for our simple document...



(Fig 2) ...and here is what it looks like when viewed from Multiview.

@{b} This text is bold!@{ub}

The tags are marked out by starting with the @-sign, and then using curly brackets to contain the settings. The tag for switching the bold on is the letter b, and the letters ub switch it off. Here's an example of a very simple AmigaGuide document, and how it looks when viewed using Multiview (see figs 1 and 2).

There are a few important points to notice. First of all, you must start the very first line of the AmigaGuide document with @database tag, so the viewing program knows what follows is an AmigaGuide document and not an ordinary text file.

> **Each possible location the reader can jump to is called a "node", and you must define these locations...**

Secondly, everything you want to display must be contained in a Node, and so before we get to including the text to display, we must start off with a node. Then we can add the text (there are no special commands needed to display ordinary text) and finally end the node. When the browser is displaying the text, it finds the Bold tag and displays everything after it in bold. When it comes to the UnBold tag, it switches back to ordinary text.

If you look at the top of the browser's window you'll see the special navigation buttons, and one of these, greyed out at the moment, will be the Index. Let's define an Index, including the tags necessary to jump to other pages. It won't appear by default, but we'll add a line to tell the AmigaGuide system that the page we define should appear whenever the main Index button at the top of the window is clicked (see Figs 3,4 and 5).

Now we are well on our way to creating a finished AmigaGuide document. We can now provide pages which the links in the Index will jump to and this will be enough to construct a simple yet effective AmigaGuide document. Here's the text which makes up the document and some pages from the finished file (see figs 6, 7 and 8).

Adding a link embedded in a sentence is equally easy. Use the same construction of the @ sign and link word as when defining links which appear in the Index. Here's an example. Notice how the word in the paragraph is highlighted – the text can still be read, but the reader can follow the link if they choose to do so (Figs 9 and 10).

```
@database Fish of Fun

@Index index-list

@node Main "World of Fish"

    Welcome to the World of Fish

@endnode

@node index-list "Links to Fish Topics"

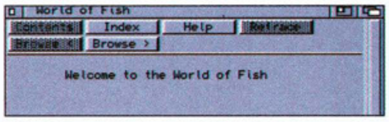
    @{b}Contents @{ub}

    @{"What is a fish?     " link what_is_fish}
    @{"How do you catch one?" link catching}
    @{"Cooking and eating   " link cooking}

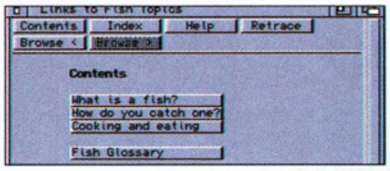
    @{"Fish Glossary        " link glossary}

@endnode
```

(Fig 3) This is the plain text needed to define the Index page with links to other pages.



(Fig 4) Now displayed with Multiview, notice the Index button is active.



(Fig 5) When it's clicked on, the Index page will appear.

```
@database Fish of Fun

@Index index-list

@node Main "World of Fish"

    Welcome to the World of Fish

@endnode

@node index-list "Links to Fish Topics"

    @{b}Contents @{ub}

    @{"What is a fish?      " link what_is_fish}
    @{"How do you catch one?" link catching}
    @{"Cooking and eating   " link cooking}

    @{"Fish Glossary        " link glossary}

@endnode

@node what_is_fish

What is a fish?

It's a creating which lives under the sea.

@endnode

@node catching

How to catch a fish

Use a pole. Or a fisherman.

@endnode

@node cooking

How to cook fish

Ask your wife or your mother.

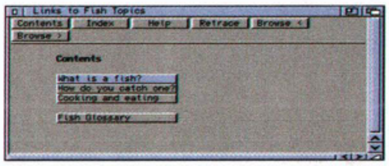
@endnode

@node glossary

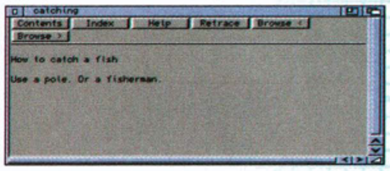
Fish
    Wet, silvery thing.

@endnode
```

(Fig 6) The entire Fish AmigaGuide document.



(Fig 9) The index page again. If you were to click on the Contents button, you are brought to the first page



(Fig 8) One of the sub-pages, reached by using the Index.

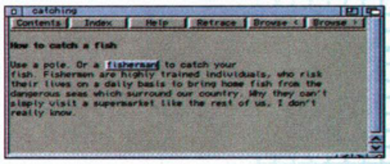
```
@node catching

@{b}How to catch a fish @{ub}

Use a pole. Or a @{"fisherman" link fisherman) to catch your
fish. Fishermen are highly trained individuals, who risk
their lives on a daily basis to bring home fish from the
dangerous seas which surround our country. Why they can't
simply visit a supermarket like the rest of us, I don't
really know.

@endnode
```

(Fig 9) The text, including a link to another node for the reader to optionally click.



(Fig 10) The link appears like a button when the document is viewed in Multiview.

MORE TAGS

@help Override the default Help page to a node of your own choosing. Use it in the same way we used the **@Index** node to define an index.

@next / @prev Define the next and the previous pages which the Browse buttons at the top of the window will move to. You can use these commands to re-order pages to suit the order in which you created them.

@title Define the title of the current node. The title will appear in the window, so use it to make it more obvious what the current page of help is about.

@{i} Switch on Italic text, works the same way as Bold with **@{ui}** switching it off.

@{u} Switch on Underlining, works the same way as Bold and Italic.

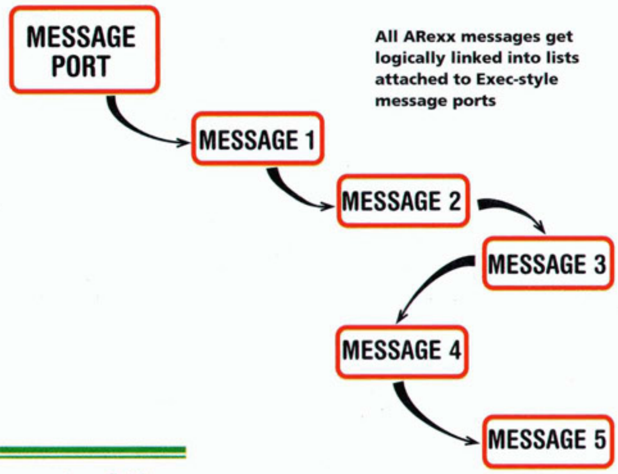
There are other commands and features but these vary depending upon the version of the AmigaGuide browser used. For more AmigaGuide documentation, get the file called "amigaguidedocs.lha" from Aminet or see the information on our cover CD.

Beginner's ARexx Coding

Paul Overaa makes sure you get the message, explaining how ARexx sends and receives the correct signals.

Ever wondered how ARexx makes sure that the right messages end up being sent to the right programs and so on? Or why this message stuff even works? Well, in this tutorial help is at hand as we offer you a beginner's eye view of how the magic is actually performed.

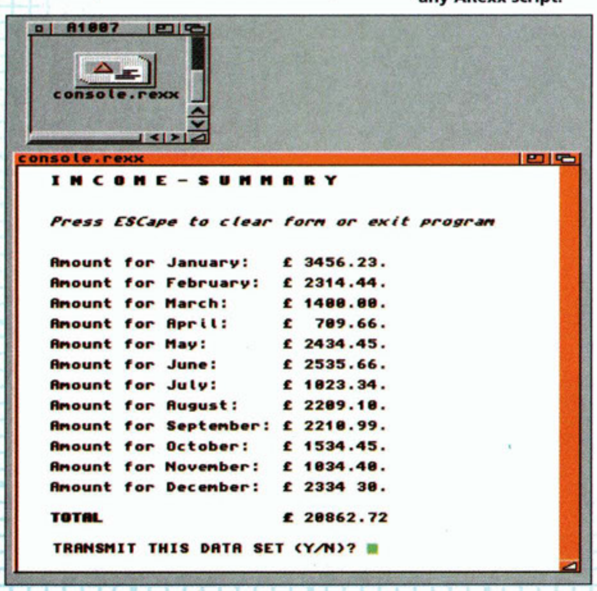
The first point worth making may come as a bit of a shock, as ARexx doesn't actually do much of the communications work itself. Instead it makes use of the general message passing facilities that Exec provides and this is where the story really starts.



All ARexx messages get logically linked into lists attached to Exec-style message ports

> "Exec ignores the rest of the message contents so programs can add any data they want..."

Exec is the Amiga's multi-tasking executive. In other words it is the part of the Amiga's operating system which controls sharing of the Amiga's processor time between all programs that are running. Exec also performs a host of other operating system 'housekeeping' jobs and many of its facilities are based on generalised routines present in the Exec library.



It's not just heavyweight applications that can be given ARexx interfaces. You can easily add them to any ARexx script.

One of the Exec's support arrangements is a message system based on the use of a data structure (a block of information held in memory) known as a message port. Any program that needs to communicate with another has to set up one of these message ports.

To transmit a message a program will allocate a block of memory, fill it with whatever details form the message and then send it to the message port belonging to the destination program.

Programs are always signalled by Exec whenever a message arrives at a message port and so, providing a program is bothering to look for these signals, it's relatively easy for it to tell when a new message has arrived.

Once a message has been collected or unlinked from the receiving program's message port and used, it gets 'replied' to. This involves the program which received the message linking it into the message port of the program that originally sent the message. The only difference on this return journey is that a 'finished with' marker is added, which tells the sender that the block of memory being used for the message is free for re-use.

Everyone talks in terms of these messages being sent and received because that, in a logical sense, is what's happening. Information is being passed from one task to another. In actual fact, nothing really gets 'sent', copied, or moved at all – the data that forms the message stays exactly where it is in

Listing 1

```
/*send.rexx*/
do while ~exit_flag
    call WaitPkt(PORT)
    msg=GetPkt(PORT)
    if msg~=NULL then do
        message=GetArg(msg,0)
        call Reply(msg,0)
        say message
if message='BYE' then exit_flag=TRUE
        end
end
```

Listing 1: An event handling loop used for receiving ARexx messages.

memory. What happens is that whenever a message has to be sent to a new destination address, pointers in the message structure get adjusted in such a way that the message becomes logically attached to some new message port.

Programs that receive a message read the contents of the very same block of memory that the program sending the message allocated and this makes the arrangement extremely fast.

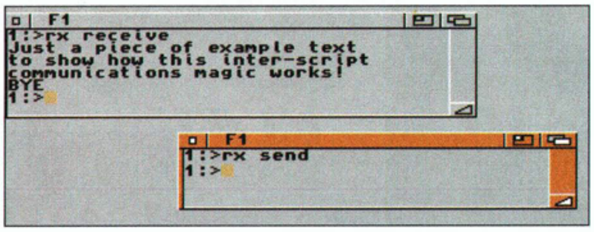
Another important point about Exec style messages is that the Exec arrangements only specify the layout of the initial part of the message (list pointer areas and so on). Exec ignores the rest of the message contents so programs can add any data they want onto the basic Exec message structure.

THE AREXX CONNECTION

ARexx ports are just ordinary Exec message ports. Nothing more, nothing less. They are referred to as 'ARexx ports' because they are being used to collect ARexx-oriented messages.

Similarly, ARexx messages are just ordinary Exec style messages with the only distinctive feature being that they have ARexx-specific information tagged on. ARexx's real job, as far as its communications facilities are concerned, is to act as a sort of control centre. Programs send their messages to ARexx using Exec functions and ARexx sends them on to the required destination, again using Exec functions.

ARexx knows where the messages should be going because you tell it, by having your script set the current host



Here's the output that will appear when you run the two example scripts!

using the ADDRESS command. ARexx checks for and locates these ports by looking at a 'public ports' list which Exec maintains. Because of this, any port used for ARexx communications has to be made visible to the system by having its name added to this list.

This is taken care of automatically by any program which contains an ARexx interface. Luckily this complexity is invisible to the ARexx user because almost all of the communications magic gets handled automatically.

As far as ARexx ports are concerned there are only two things ARexx users need to remember. Firstly, a message port must be recognisable to ARexx when you try to communicate with it. In other words the program you wish to 'talk to' must be up and running before you try talk to it via ARexx.

Secondly, you need to be aware of the fact that the functions used to search the Exec public port names list are case sensitive. This, by the way, is the reason why when you get the case of a port name wrong in an ARexx script the port never gets found and ARexx issues an error message.

A TWIST IN THE TAIL

Most ARexx users know that scripts can communicate with other programs by transmitting commands to the currently logged-in 'host' port. Alternatively, they are used in the 'macro' sense with the communications being handled, more or less automatically, by the program running the macro.

There is, however, another less frequently mentioned side to this communications magic and that's when scripts explicitly act as receiving stations for commands sent by other scripts.

These types of communication are fairly easy to implement because the rexxsupport.library provides a range of functions that handle the hard work. To understand how everything works some additional details of the message handling framework are needed.

For a script to act as a receiving station for messages it must have an ARexx port available. The normal approach is to make a call to the rexxsupport library's OpenPort() function and, providing this is successful (as indicated by a non-NULL return value), the main communications scenario can begin.

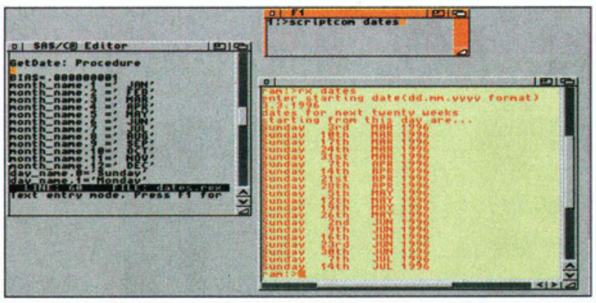
Message collection starts with the use of a routine called WaitPkt(). This is a 'wait for message packet' function that puts the script to sleep until something of interest happens, namely the arrival of a message. As soon as a message packet arrives at the port the WaitPkt() function returns and the address of the message can then be read using the support library's GetPkt() function.

In most cases this provides the address of a real message but, since there are odd occasions where the function can fail, it is safest to check that the returned address is non-NULL. If it is, then the text part of the message, the real data, can be extracted and used.

The function used for text extraction is called GetArg() and it requires the address of the message packet plus a parameter number (which, when dealing with simple commands, will always be zero). Once the text has been extracted the support library's Reply() function is then used to reply to the message. A common loop for carrying out these types of operations, plus a typical piece of event handling code, can be seen in listing 1.



One use for script-script communications would be to remotely control the execution of a standalone script running in the background.



Another possibility would be the creation of multi-module scripts that provide pop-up console windows which run as completely separate tasks and collect information for display via messages sent from script to script.

I'm just printing the contents of each message as it arrives and exiting from the loop as soon as a 'BYE' string is detected. Notice, incidentally, how the ARexx ~ operator is used to invert the state of the exit_flag variable. The idea is to produce a loop which is only performed as long as exit_flag is not set.

Listing 2

```
/*send.rexx */
PORT='myport'
address value PORT'Just a piece of
example text"to show how this
inter-script"communications magic
works!"BYE'
```

Listing 2: Transmitting messages to another script couldn't be easier!

The easiest way to appreciate these ideas is to see and run some code for yourself, so I've put a pair of examples on the coverdisk this month.

To run them, copy both the receive.rexx and the send.rexx scripts to the RAM disk and open two Shell windows setting the current directories of both of the windows to RAM. Once you have done that, type:

rx receive into one Shell.

Although nothing will seem to happen the script will have started running and will simply be sitting in the event handling loop waiting for a message to arrive. If you now switch to the other Shell window you can run the message sending script by typing:

rx send

You'll see this text appear at the first Shell window:

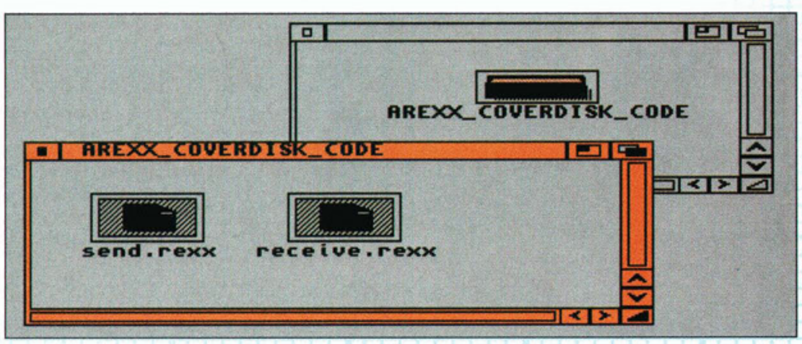
Just a piece of example text
to show how this inter-script
communications magic works! BYE

The receive.rexx script will then terminate and the normal Shell prompt will reappear. You'll see why this happens by looking at listing 2 which is the complete send.rexx script.

This program starts by using the Address command to set the current host to 'myport', which is the ARexx port opened by the receive.rexx script. The other lines in listing 2 are just text strings which, as they mean nothing to ARexx itself, get classified as being commands intended for an external program and are transmitted to the current host, the receive.rexx script.

Now play around with the examples, modify the text messages being sent and generally get a feel for what's going on.

Once you understand the overall framework of the event handling loop in the example you should be able to make similar loops in your own scripts.



You'll find runable examples of script-script ARexx communications on this month's coverdisk.



MailBag



Send your letters to: Letters To The Editor • Amiga Format • 30 Monmouth Street • Bath • Somerset BA1 2BW or email to:amformat@futurenet.co.uk – putting 'Mailbag' in the subject line.

BASIC QUERY

In the last couple of months I have started to use a Basic programming language on my Amiga A1200 called *GFA BASIC 3.5*.

This came with the Amiga when I bought it four years ago from SILICA, but the package only included the interpreter, not the compiler.

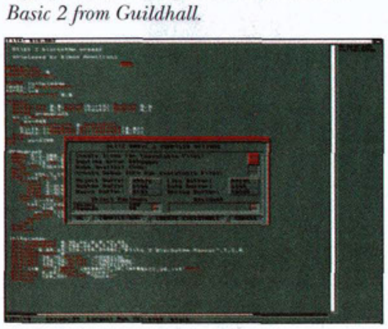
I have tried numerous public domain outlets but have had no success in tracking down a copy. I was hoping that you could tell me where I could purchase a copy, or failing that, maybe a fellow reader could help? Thanks in anticipation!

Alun Coleman
Lincs

GFA Basic *hasn't been published for some time, so I fear the likelihood of you finding a new copy are even slimmer than Mark's chances of being served in a pub without ID.*

You could try placing a Reader Ad, as that's exactly the sort of thing that section of the mag is for.

Alternatively, why not try to seek out a copy of HiSoft Basic from HiSoft, or Blitz Basic 2 from Guildhall.



Our Reader Ads section is ideal place for finding old programs such as *GFA Basic*.

SCANDINAVIAN SHOPPING

I write in reply to Roy Krister Ellingsen's (from Norway) request in the November issue for addresses for any English stores.

I don't have any English addresses, but I have the address of a Norwegian computer firm which should make it much easier for him and others to get their Amiga equipment.

They sell all, or almost all, Amiga equipment currently available on the market.

The address is:

Datakompariet AS
Teknostallen
Prof. Brochs gate 6
7030 Trondheim
Norge/Norway
Tel: (+47) 73 54 03 75
Mon-Fri: 9am to 5pm.

I hope you will print the address and telephone number in your next issue to help him and others have a better future together with their Amigas.

Arild L Kram
Trondheim, Norway

Thanks for the info. Our Shopwatch directory should be starting up very soon!

PPC

Before I start, this is not a rant from a Luddite. I'm a total Amiga fan and support any idea to keep it alive, but I've been very disappointed to learn that the PPC boards are not going to be the dream I believed they would be.

I remember when the A1200 first came out, as people were upset because *not all their software would run*. However, at least 70% of it worked. Now we've been told these new super boards won't run any software not written specially for it (only to Fall Back Mode).

So why would anyone buy this board? I've got a 50MHz 68030 Viper-V and considered upgrading, but why should I when my software would only function in Fall Back Mode at 50MHz? This is not much of an upgrade!

Buying this board for snazzy games isn't worth it as I want to use graphics and 3D Packages like *Real 3D*. However, as *Real 3D 3* costs over £300 I certainly couldn't afford to buy both board and software, even if the companies could be bothered to rewrite the software. Some of the companies don't even exist now.

Just think what it would leave you with in Fall Back Mode – not much better than what we've got, so it's not a step forward, more like a step sideways.

My original impression of this board was as a kind of super co-processor with no stopping of the main processor. This would make 3D renders on my original software amazing. I'm not saying I want all my software to run but at least the system's legal stuff should. If this was the case then my ill-gotten gains would go onto the board as soon as possible.

But just buying it for games? No thanks, I've already got great software, so why waste the money? I've no reason to think that this is going to improve the

Continued overleaf ➡

GAME DROUGHT?

I have recently acquired an Amiga CD32 but am having great difficulty getting any games for it. I wondered if you could help. Maybe you could send me a list of suppliers? I really would appreciate it as I'm getting a bit bored with the two games I've got.

Karen Marsay
Cleveland

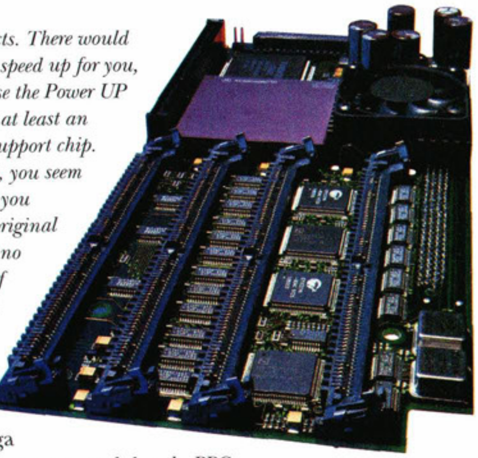
***There are only a few new CD32 titles being produced, but there are still quite a lot which are available. Try Epic and Special Reserve who, amongst others, advertise in* Amiga Format.**



Just some of the range of CD32 games which are still available.

Amiga's chances. I've got great hope but until a proper solution comes up I'll stick to my 68030 Viper. One day maybe… I still live in hope.

Dave Hutchinson
Dursley



The Power PC board in all it's glory. We still think it's absolutely brilliant.

First some facts. There would actually be a speed up for you, simply because the Power UP cards require at least an '040 as the support chip.

Secondly, you seem to imply that you believe your original software will no longer work if you install a PPC board, which just isn't the case at all.

At Amiga Format *we never suggested that the PPC would instantaneously make everything run faster, though I understand other magazines may have muddied the waters with some rather vague and misleading reports about the PPC's capabilities and how it functions with regard to the Amiga. The PowerPC is not a replacement part for the 68060. It is a completely different processor. You can no more expect to plug a PPC chip into an Amiga and get everything to go ten times as fast than you could with a PC, or indeed with any other computer.*

The PowerPC is piggy-backed onto a processor card with a 68k processor, either a 68040 or '060. The "native" processor passes instructions specifically written for the PPC to the new processor and lets it execute them, giving a terrific speed increase to some applications which make use of it. Your analogy to a co-processor in this sense is very accurate. Rather like an FPU, the PPC chip needs to have code written for it, or it is of absolutely no use.

Software must be written to take advantage of the PPC, so none of your existing software will actually run any faster on a PPC card. Unless the actual Amiga OS is re-written to take advantage of the PPC, only software which has been programmed to take advantage of it will show any speed increase. At the moment, the range of this software is quite small, but it is growing.

3D rendering software, such as the forthcoming Tornado, *will be able to render scenes much faster than you can in* Real 3D. *I must point out that exactly the same limitations will occur with any non-68k processor which may be used with the Amiga. This is not the "fault" of phase 5 or of any other manufacturer.*

Nobody is going to force you to buy one, so if you don't want to have any extra speed, then don't bother!

IDEAS DOWN UNDER

From a loyal Aussie Amiga fan, greetings to all fellow Amigans around the world. I would like to say a big thank you to *Amiga Format* for being one of the continuing sources of important information concerning the future of the Amiga.

In Australia we have no commercial magazines left that provide Amiga coverage so the news we get from England, although a month or two late, is very welcome. Yes, I know that the Internet exists but my present machine, which is a slightly boosted A2000, is not really up to getting it.

It is encouraging to see that Gateway 2000 have now got the rights to our beloved machine. I would ask all Amiga enthusiasts, and I guess that if you are still using an Amiga and reading *AF* you must be an enthusiast, to write to your local Gateway 2000 stores and make enquiries about their plans for the Amiga. None of this slagging off PCs though, as that would only be counter-productive. Ask some serious questions about plans for new models, processor types, Amiga DOS and Workbench upgrades, etc. instead.

Let Gateway 2000 know that there are intelligent people out there using a remarkable computer called the Amiga. These computers still blow me away! When I see an ancient A500 scrolling text as smoothly as butter and compare it to my recently acquired Cyrix 200-

SORCERY

I have the game *Simon the Sorcerer* and I saw that last January's *Amiga Format* included the whole story of the game and how to play it. With this guide I thought I might have a go at it.

The game instructions were perfectly clear until I came across the part in the story where you had just picked up the watermelon and had to head up to the blacksmith's cottage and go up behind it. You're then supposed to find the boxes which contained the rat's bone. When I came around the corner there were no boxes, just the pub and a flower-bed.

Since you have written a guide to the whole story I wondered if you could come up with a solution to help me finish this great computer game. I would really like to hear from you about this if you can help.

Gemma Penny
Totton

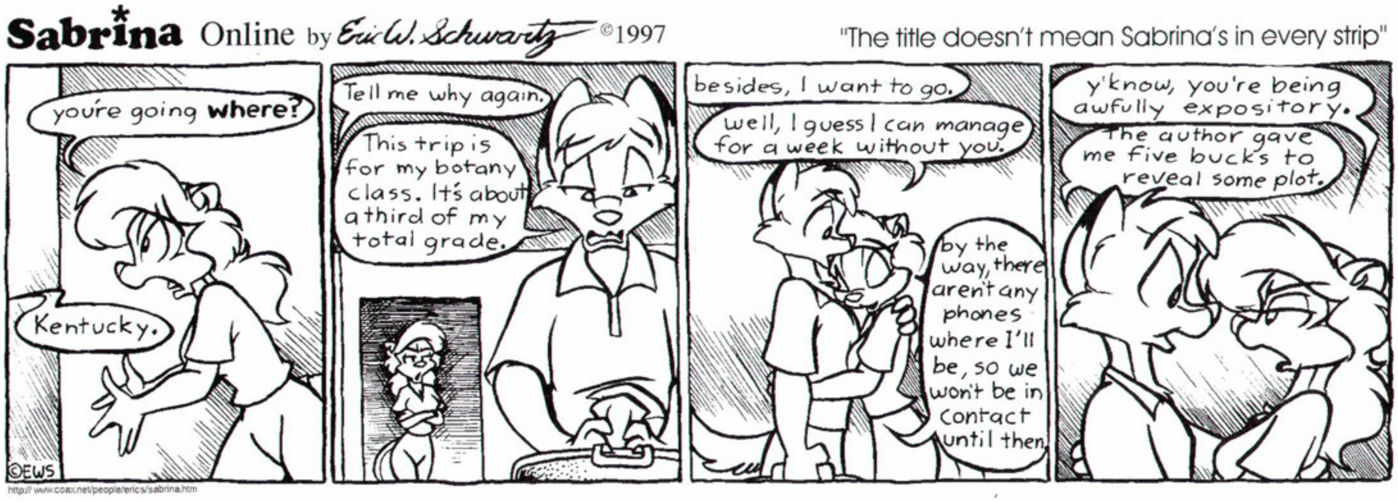
Hmm. This is really a question for Helping Hands isn't it? Oh well, let's see now. Did you remember to give the gold to the wizards? Did you go and visit the talking tree (with the white spirit)?

The boxes should appear outside the shop if you have followed these steps.





Wizardly frolics, watermelons and rat's bones in *Simon the Sorcerer.* Shouldn't this be in Gamebusters?



based PC, which can finally scroll text without jerking it around, I know we have something special in our little machines. It's hard for me to imagine a future without my Amiga and I know which machine I still prefer to use, don't you?

So come on all of you, get in touch with Gateway and let them know exactly what you want.

Peter Campbell
Melbourne, Australia

If any of you do want to write to Amiga Inc. directly, you can do so at either of the following addresses: Amiga Inc, 600 North Derby Lane, PO Box 1842, North Sioux City, South Dakota, 5704D, USA.
Amiga International Inc, Robert-Bosch-Str. 11B, 63225, Langen, Germany.



Gateway 2000 – let them know what sort of new Amigas you want to see!

SHOP CONFUSION

When asking if there was a list of games and utilities available for the Amiga while buying an Amiga game at one of Guildhall's outlets I was surprised to hear one of the staff say: "The Amiga! We are running out of what we have and won't be restocking. The Amiga is finished."

I said that I understood it had been bought up by Gateway and was running now. He replied that it did for a while but not anymore and they had heard no word from them for some time. If this is not true it would be advisable for staff at Amiga outlets to be given the facts to pass on to potential Amiga customers.

I do not wish to give the particular outlet address. It is not the fault of the staff but rather the lack of information.

John Hart
Surrey

Guildhall don't actually own the shops, they distribute their titles through many different outlets. I imagine you were actually in one of a chain of stores that stock these products.

Unfortunately, keeping staff up to date doesn't seem to be a high priority for some of these shops. The only way this sort of situation will change is if the shops themselves take responsibility for giving people the correct information.

I'm sure the likes of Guildhall and their other suppliers have never told them that the Amiga is dead.

STUCK ON STICKERS

I am writing to tell you that I think Anthony's idea (issue 104) about the stickers is great. Use all the new logos like "Powered by Amiga", because I think towers look like PCs if you don't see the Amiga logo.

Also, can you make a sticker for the monitors and the mice because they look rather dull. I think your magazine is great. Keep up the good work!

Jay Gibbs
Bristol

Lots of support for Amiga stickers – something like the logo below?

powered by AMIGA

I am writing in complete agreement with the letter from Anthony in Preston printed in issue 104 as I think the idea of printing some sticker logos is great and long overdue. I can imagine that all Amiga users, apart from the strange or ignorant ones, would appreciate this.

Jack Strand
Glasgow

EPSON SALTS

I noticed the news article in issue 104 of your magazine which stated that Epson had agreed with Gateway 2000 to put printer and scanner drivers in their product boxes, mentioning the Amiga in their manuals.

I don't think this is enough and I believe that Epson could do a whole lot more for the Amiga community.

It was good of Epson to do this in the first place and it definitely makes good business sense, but what about a mention in their advertising as well?

I saw one of their advertisements in *The Guardian* about their Epson Photo Studio range, which comprised of the PhotoPC 600 digital camera, the GT scanner for the scanning of photographic negatives and the *Photo Studio* manipulation software. It mentioned the PC and the Mac, but there was no mention at all about the Amiga.

Now I know that Epson's photo manipulation software may not appear on the Amiga (what's wrong with using *Photogenics*?), but what about drivers for the GT scanner and the digital camera? I saw the agreement between Gateway 2000 and Epson as a feeble, if not laughable, attempt to get Amiga owners to buy Epson products, but not a way to restore the public's faith in the Amiga, which is what they should be doing.

I have read a lot of letters in your magazine and other rival magazines from readers who want Gateway 2000 to advertise, but I think that manufacturers like Epson should advertise instead.

Some computer companies may think that if a company like Epson supports the Amiga in their advertising as well as in their manuals, then they may also join in and show their support.

If Gateway 2000 want the Amiga to have, as they said, "a strong role in our multimedia computing world", then I think they'd better start talking to Epson again. Don't let the Amiga die!

Christopher N Hindley
Flintshire

I can certainly see that acknowledging the fact they supported the Amiga would be in Epson's advantage. I don't think we can rely on them to spread the word for us, though. If other readers have any marketing ideas, we'd be pleased to hear them.

Continued overleaf ➡

Sabrina Online by Eric W. Schwartz ©1997 "Sexier than we've ever seen her before"



http://www.coax.net/people/erics/sabrina.htm

STOP START

I purchased a Viper 1230V at the World of Amiga Show and I'm thoroughly satisfied with the product. I even found out a very useful hack last night as well!

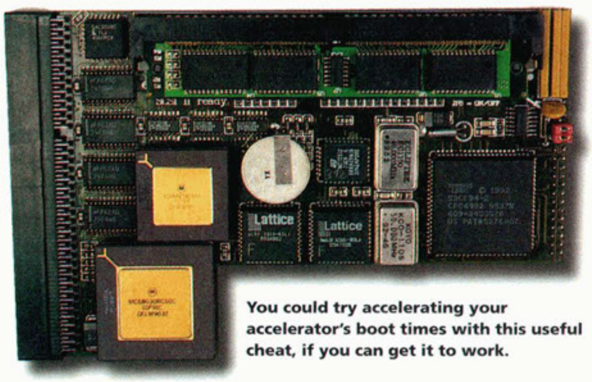
I was told by Power Computing's staff that the 1200 would take about 3/4 to 1 minute to boot. After a while I got really tired of the long boots, but thought I just had to live with it.

Yesterday when using my Amiga (I use it every day!), I clicked the left mouse button after the hard drive clicked for the last time until it started to boot. The Amiga started to boot! The SCSI functions as normal and the 68030 RAM was as normal!

Now every time I boot I press the left mouse button and my delay has completely gone!

Do all other accelerators cause long boots? I know the 1220/4 doesn't, but maybe the 1260 or 1230 do. Maybe my Amiga 1200 is unique.

Nick Lamburn
Devon



You could try accelerating your accelerator's boot times with this useful cheat, if you can get it to work.

I have never heard of this shortcut before. Well done. The boot delay depends on a whole lot of things, one of which is the drive itself. It would be interesting to hear from other readers who can get this trick to work.

AD MAD

I have just graduated from a BA (Hons) Media Production course at Bournemouth University, and I am now working at a post production facilities house in London's West End.

I am training to edit TV and Video on Avid Media composer, which we can master onto DigiBeta. I have masses of broadcast quality equipment at my fingertips whenever the edit suites are not being used.

I keep hearing that Gateway do not have the budgets to produce and screen commercials for the Amiga. I know that the material is already out there to produce a very influential commercial, and I want to harness all that talent and produce a commercial that I can hand over to Gateway. They can either accept of refuse it as a part of the Amiga's rebirth.

I want to produce the ad in the style of the demo scene, but I want to include all aspects of what the Amiga is about. I ask anyone that would possibly want to have any of their work included to send it to me, including music, sounds, animation, artwork, demos and any other ideas that you might want to put forward.

I can accept almost any form of media including Zip, Jaz, Syquest EZ, CD-ROM, HD, DD and even videotape. I can also take 24-bit picture sequences. I might consider input via email but please inform me first.

The reason I am asking for input rather than just taking everything off the Internet is so that everyone who sends in stuff wants it to be included and consents to its use.

Anyone who sends me something should include an SAE for the return of their media.

Paul Ingvarsson
Paul@Icemate.demon.co.uk
18a Queens Avenue
Muswell Hill
London
N10 3NR

We wish you luck, and I'm sure you will get a huge response. When your work is finished, we'd very much like to take a look at it. We could even include it on our CD in the form of a CDXL animation.

RTG

I am writing about Simon Goodwin's RTG article in *AF100*. I have a PicassoIV with the Picasso96 s/w running perfectly in an A4000 with WB v3.0.

Since v1.17, Picasso96 supports WB v3.0 (the v1.20 is available on your *AFCD17*). That version was released in the above site at the start of April and by the time you wrote the article, v1.21 was available from June 1st 1997 (and probably a new one will be in the Picasso96 site: http://wwwcip.rus.uni-stuttgart.de/~etk10317/etc/Picasso96.html by now).

In order for your article to be more accurate and updated you should have reviewed the latest versions of both CGX and P96 s/w. There have been no drawbacks to using WB v3.0 on a P96 for several months now, nor is there any need to spend £80-£90 to get v3.1 ROMs to have Picasso96 running in your system if you have WB v3.0. Also, P96 is Freeware and not Shareware like CGX, which means there are extra expenses to register.

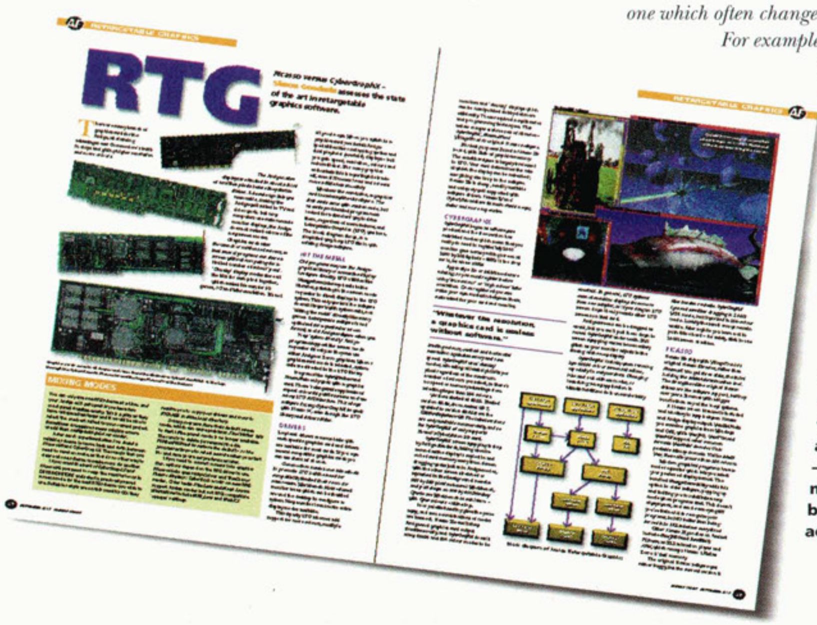
Also, CGXv3 is now not the only choice for CV64/3D users as from v1.29, P96 supports that gfx card. I hope that in the new *AF* you will note the latest changes in this area and restore the balance.

Theodoropoulos Kostas

I do have to say that all the information in Simon's article was correct at the time of writing. You do have to bear in mind that the magazine is not all written and produced on the last day of the schedule, and things like features are often done weeks before the magazine is printed, and therefore often more than a month before the magazine actually goes on sale.

I can't promise that all information is 100% up to date in the magazine by the time you read it, as the computer industry is one which often changes very rapidly.

For example, take how quickly a WB3 version of P96 came out after VillageTronic were no longer allowed to sell WB3.1. Thanks for the update though.


RTG

It's not our fault! All of the information we print is accurate at the time of writing – unfortunately, this may be over a month before the magazine is actually printed...

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HP Deskjet 600/60/90/93/94 Black	23.00	22.80
HP Deskjet 600/60/90/93/94 Tri-Colour	24.00	23.80
HP Deskjet 600/60/90/93/94 Photo Tri-Colour	31.80	31.60
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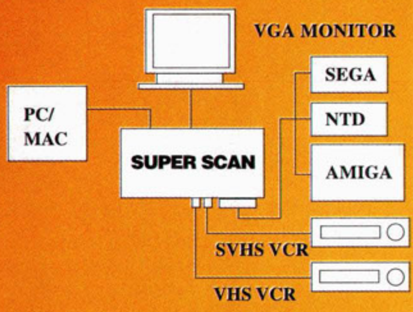
Apple Stylewriter	8.50 for 2 x 20ml Refills
Canon BJ 10/10ex/20/200/230	8.50 for 2 x 20ml Refills
Epson Stylus 400/800/1000	8.50 for 2 x 20ml Refills
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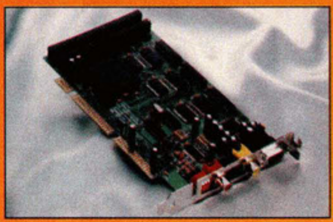
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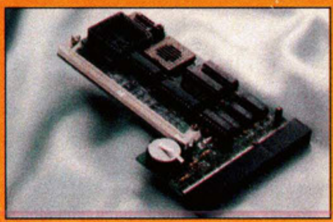
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The Gallery

ON THIS MONTH'S CD

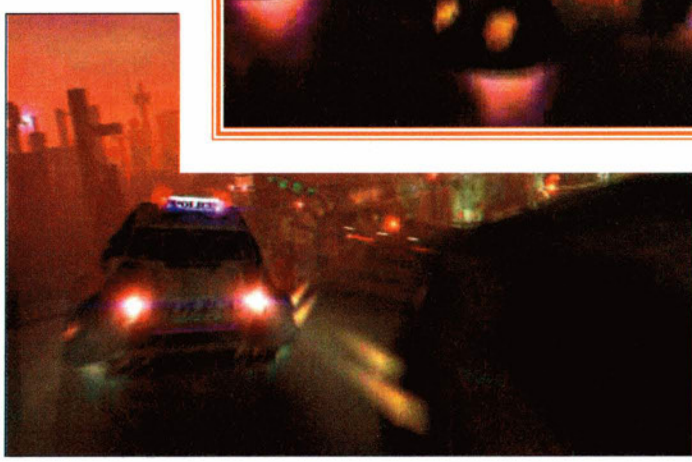
AFCD23:-ReaderStuff-/-Gallery-

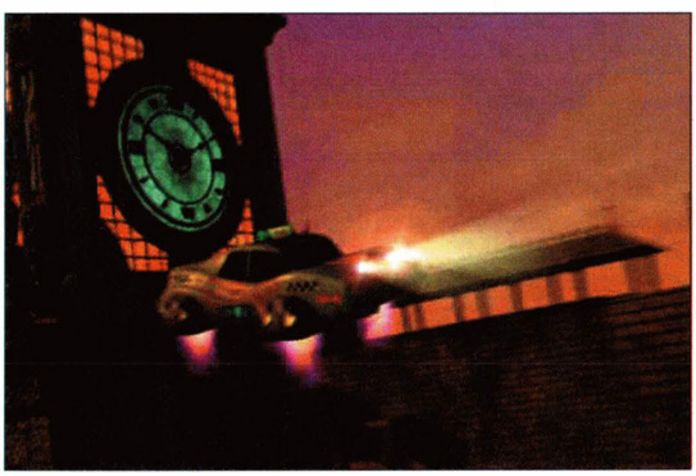
There's a definite sci-fi feel to this month's Gallery. **Ben Vost** looks on from a galaxy far, far away…

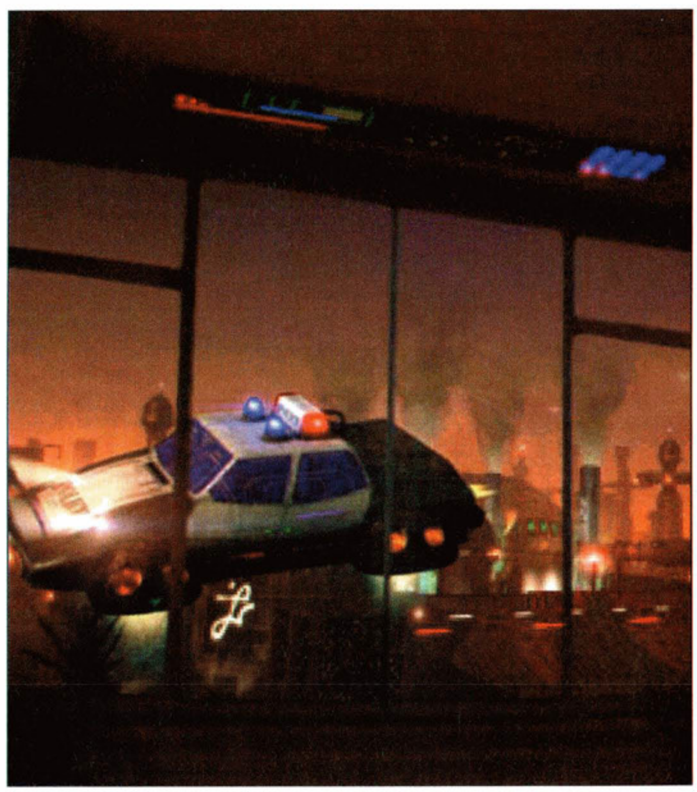
£50 Winner!

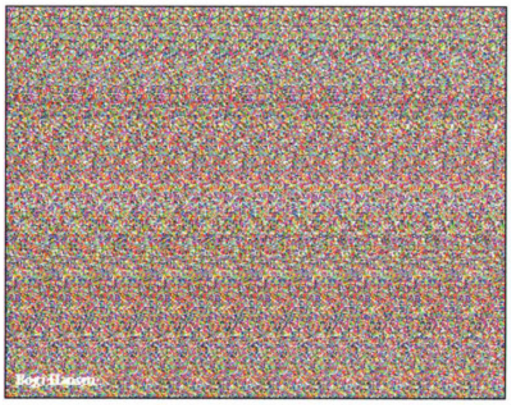
Jeff Ranasinghe CityDev pics
Hopefully Jeff will honour us with his completed animation as soon as it's finished so we can put it on our coverdisc.





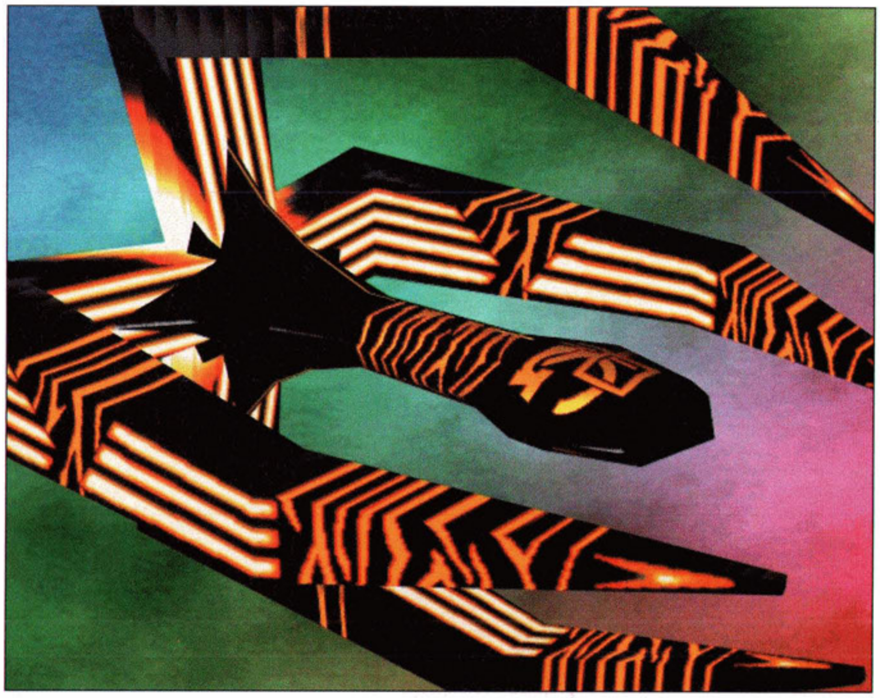


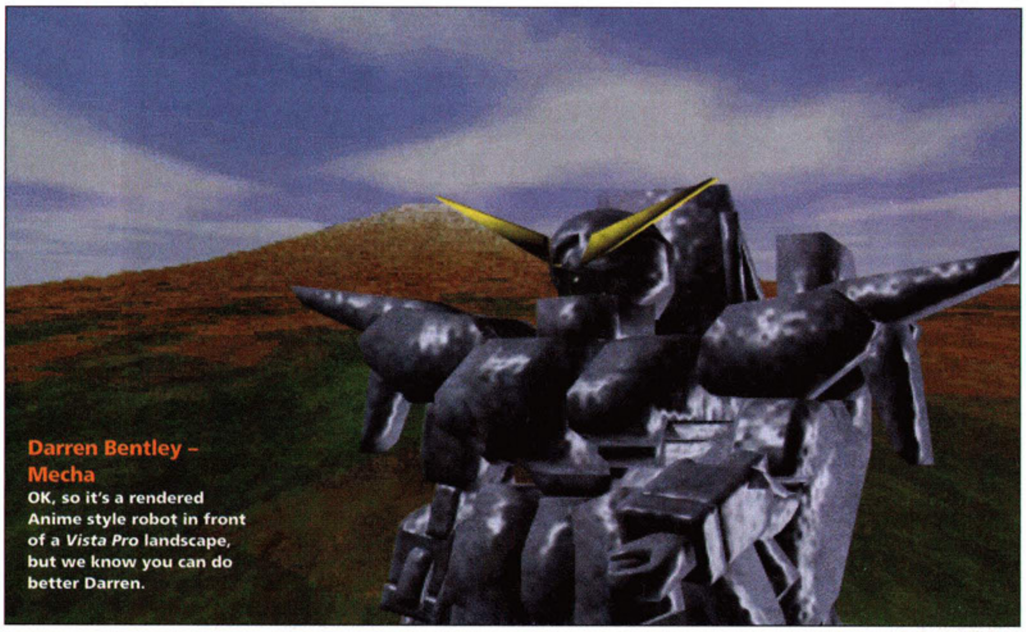




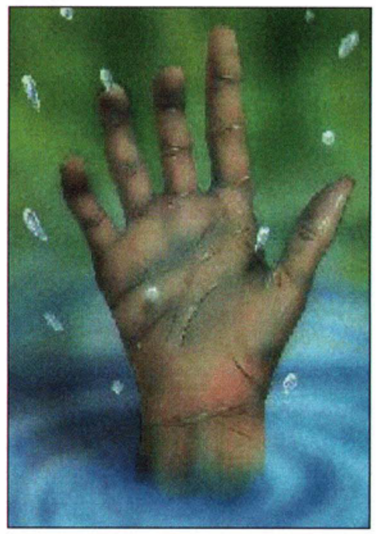
Bogi Hansen – Image01
This image is supposed to look like this alright? It's one of them there stereograms. Remember them? You might not be able to see the image at this resolution so look at the one on the CD.

Chris Boyle – Tiga
Although the modelling on Chris's spaceship is rudimentary at best, it's the texturing that really grabs the attention with the glorious tiger stripes really lifting what would otherwise have been a fairly standard picture.





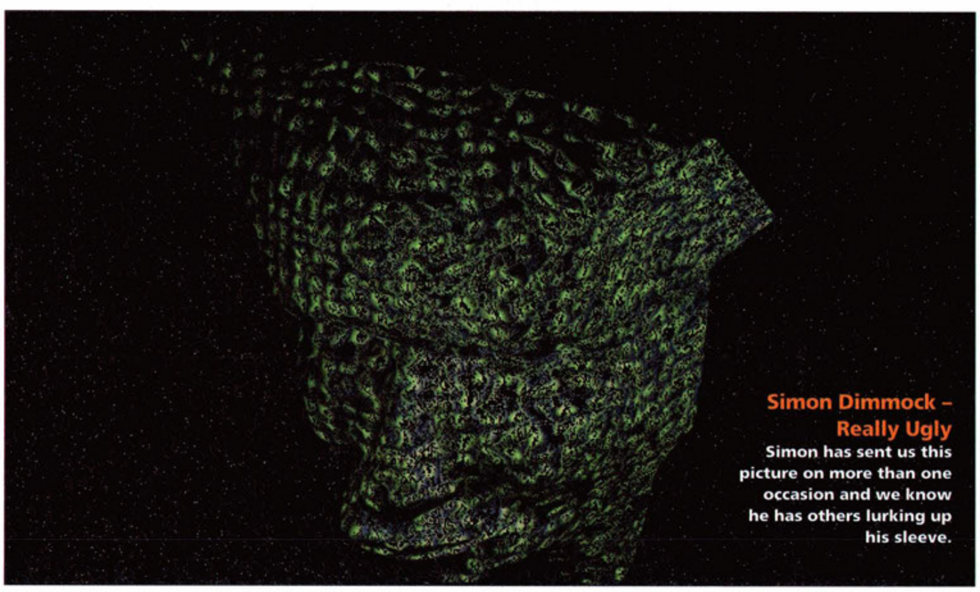
Darren Bentley – Mecha
OK, so it's a rendered Anime style robot in front of a *Vista Pro* landscape, but we know you can do better Darren.



Peter Webb – Coming up for Air
Beautifully hand-drawn in *Photogenics*, Peter Webb's hand is gorgeously detailed.



Scott Brimley – The Woman
Hah! Looks a bit like one of my old girlfriends back when I was a bit of a Goth! I liked the other version you sent us too, Scott.



Simon Dimmock – Really Ugly
Simon has sent us this picture on more than one occasion and we know he has others lurking up his sleeve.

Readers Ads

Choose modems. Choose CDs. Choose towers. Choose A1200s with big printers. Bargainspotting, with ***Amiga Format***.

For Sale

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● **Tower for A1200** with PSU, IDE interface, with or without eight-speed CD-ROM from Hi-Q, £70 or £160. ☎ 0171 4873998 (day), 01707 645636 (evenings), or email chas@chirop.demon.co.uk

● **Amiga 1200 2Mb RAM,** games, art and music software £120. Philips colour monitor £45, 4Mb RAM board £32, 850Mb HD £69, A500 2Mb £39, high density floppy £15. ☎ 01372 470654.

● **Amiga games for sale,** all boxed originals. ☎ 01246 472104 after 10.30am.

● **GVP SCSI controller card** for the A2000, 3000 or 4000. Complete with manual, as new. £80 ono. ☎ 01282 862363.

● **A1200, 2Mb, HD,** four speed CD-ROM, Star 24-pin dot matrix colour printer, over 30 CDs and loads of software. Bargain, £300. ☎ Sam Edwards 0121 553 5125. West Midlands.

● **Apollo 1220 accelerator, 4Mb** RAM, and FPU, £55 ono. Colour printer, Citizen Swift 200, complete with extra ribbons and software, £65 ono. ☎ Stuart 0181 9305753 or 0181 9300532.

● **Rise of the Dragon** £10, Abandoned Places £8, Leisure Suit Larry £7, Dungeon Master 2 £10, Might and Magic 3 £12, TransAntarctica £7. AFCD 98 and 99. ☎ Mike 01784 885914.

● **A1200/A600 hand scanner** black and white with software and interface. Upgrade forces sale. £40. May swap. Brand new Surfer data fax voice modem 33.6bps, boxed, unwanted prize. Software, etc. £80. May swap. ☎ 01744 733984.

● **Panasonic KX-P1123,** 24-pin dot matrix printer, vgc. Includes manual, dust cover, printer lead and legs, £45. ☎ Ronald Keislair 0161 9804793 (evenings, weekends).

● **Pools of Darkness, Kampgruppe,** Legend/Kyrandia, £10 each. Over 100 more, all boxed originals £2-£8 each. A1200 as new, complete, £100. A600 £50. External drives £20 each. ☎ 01322 663624.

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● **A2000HD 1+4Mb RAM** 40Mb HD, twin floppies, WB2.04. Commodore 1084 monitor, Star LC24-200C printer. All in original packing and including all manuals and system disks. £350 ono. ☎ Mike 01308 863765.

● **A1200 hard disk drive install kit.** Includes video, full instructions and hard disk prep floppy. £15. ☎ Peter 01502 589376.

● **RocTec external floppy drive £25.** RocGen genlock for Amiga £20. Cannon BJ10SX printer with 50 sheet feeder and rechargeable battery light. Home use only. £125, all pwo. ☎ Brian 01384 860358.

● **A1500+, WB2.05,** 1084S Video monitor, GVP 120Mb HD with 8Mb RAM, GVP 68040 accelerator with 4Mb RAM, Star XB-24-10 dot matrix printer, external speakers, software, books. £800. Buyer collects. ☎ 01923 235629.

● **GVP G-force Amiga 1500/2000** accelerator, '030 25MHz FPU £100 ono. Amiga 500+ and A500HD+8 HD, 2Mb RAM £140. A500 and memory upgrade £60.Will exchange for other Amiga parts if of any interest. ☎ S. Young 01189 455009 or email scy@scysoft.demon.co.uk

● **Magic Boy £5, Desert Strike £5,** Enchanter £2, Planetfall £2, Hook £5, European Champions £5, Mr Blobby £3, War in the Gulf £5. ☎ Richard 01834 813800 after 4pm.

● **Amiga 4000/'030** 26Mb, 1Gb IDE HD, 120Mb SCSI HD, multiface card, 25MHz FPU, CD-ROM, high density floppy drive, keyboard, mouse, colour monitor. £650 ono. ☎ 01226 234736.

● **Trapdoor memory expansion** with 68882 FPU £45, 4Mb SIMM £10, Wing Commander £5, Monkey Island 1 and 2 £5 each, 2x CD-ROM drive (SCSI) £50, Classic Squirrel £40. ☎ 01663 742228.

● **A1200, 10Mb, 80Mb HD** and A600,over 15 boxed games, over 20 mags with disks. A1200 £200. A600 £60. Games £50. Mags £20. All ono. ☎ Adam 0191 4277465.

● **Selection of simulation games** not compatible with my new 68060. Original disks, manuals and mostly original boxes. Priced to sell, £3 to £8 plus postage. email gwa@kelso.u-net.com.

● **Amiga 1200 80Mb HD 2.5".** Includes monitor, manuals, disks, mouse, leads, power pack and games. Good condition. £145. ☎ Joe 0181 7511549 or 08362 61139.

● **Small hard drive and RAM card.** 60Mb HD, £25. 4MB RAM card with 33MHz 68882 PLCC FPU, £45. Both for £60. Will format/partition HD. ☎ 01530 838291. Weekday calls after 5.30pm.

User Groups

● **Got a modem for Christmas?** Then why not call one of the coolest BBS's. ☎ Zowe 01635 820590 (6pm - 1am). 33.6k, over 2,500 files online and 100s more added weekly.

● **Got an Amiga?** Want to know more about it? Come to the Huddersfield Amiga User Group. Meetings on first and third Wednesday of the month, beginners to experts welcome. ☎ Geoff 01484 543534 or email geoff@geemil.demon.co.uk

Personal

● **Anyone with knowledge of Grac2** Blitz2, or just wants a pen pal for amiga talk, write to: Robert Hutchinson, 23 Weybridge, Woodside, Telford, Shropshire, TF7 5PZ, England.

Wanted

● **TransAntarctica.** Does anyone know. where I can get a copy? ☎ Kevin 01691 661480.

● **IDE buffered interface** plus cables for adding HD, CD-ROM, other IDE device. Will swap for Surf Squirrel. email dbateman@globalnet.co.uk or ☎ 01904 624637 after 3.30pm, or anytime on weekends.

● **Christmas Dizzy and B17** flying fortress. Will pay £5 each. ☎ Alexi 0161 3049471.

● **Game wanted – Aladdin** for A1200. ☎ Tony 01773 749078.

● **Urgent! Zak McKracken** and the Alien Mind Benders. Doesn't need to have all papers, just code sheet. Fair price paid. ☎ 0181 4061544.

● **Help with Legend** or walk-through. ☎ 01246 472104 after 10.30am.

● **Real 3D contacts wanted.** Animations, textures, objects renderings, information, Imagine hater! D Hutchison, 65 St. Georges Road, Kings Hill, Dursley, Glos, GL11 4DT. Sci-fi objects especially wanted.

● **Hard drive for A1200,** also CD32. Will pay reasonable price plus postage. ☎ Billy 01642 890582 (after 6pm).

● **Cyberstorm 68060/50.** Why not sell yours and upgrade? Also Easy Ledgers 2 accounts software wanted and Photogenics 2. Contact Neil Tufano, 6 Myrtle Close, Robinswood, Gloucester, GL4 GYP.

● **Cheap CDs,** especially magazine coverdisks, early Aminet disks – anything at all. Full details to Paul Pinch, 32 Honeyborough Green, Neyland, Milford Haven, Pembrokeshire, SA73 1RG.

● **Genlock for A1200,** prefer Lola 2000 or Vinegen. Must have 'S' (high band) input/output. Also Karafont disks or any fancy fonts. Fair prices paid. Ralph Gibbs. ☎ 01202 427863.

● **My Final Copy II Speller disk** has gone down. I need to replace it. Can anyone help? ☎ Bob 01757 709763.

● **GB Route Plus and Plus Edit** with manual. ☎ Bill 0191 3781728.

● **Amiga Format CDs 1-8** needed to complete collection. ☎ 01371 811383.

● **Ghostbusters 2 by Activision.** Good price paid. Write to Eric Park, 4 Springbank Terrace, Paisley, Scotland, PA3 2ML.

● **TransAntarctica and Pirates** for the A1200. If you have a copy to sell, I won't waste your time. ☎ Luke 01723 582498.

● **Legends of Valour, Bloodwych.** ☎ 01294 833838.

● **Rocky Horror game.** Email Jeff McKee – 104357.1370@compuserve.com or jmckee@wnybbs.net.

● **V-lab video card for A4000.** Amiga 4000/2000 keyboard. Good price paid. ☎ S. Young 01189 455009 or email scy@scysoft.demon.co.uk

● **4Mb RAM upgrade card** for Amiga 1500. Would consider 2Mb. ☎ 01453 882912.

● **Worms, the original,** and/or the Director's cut. Price must be reasonable and game(s) should be boxed and in reasonable condition. ☎ Gary 01329 312392 after 4pm.

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Serious disk



AMIGA FORMAT

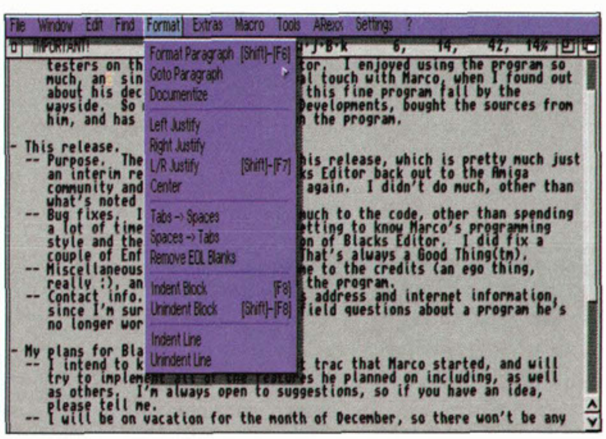
David Taylor introduces four very different utilities that can become invaluable to any serious Amiga user.

Blacks Editor

This text editor is one of the best available on the Amiga. Like all the standard ones, it features the ability to cut, paste and delete blocks. However, it also has an ARexx port so you can use external programs like *Aspell*, allowing you to add spell-checking capabilities.

Blacks Editor can have multiple projects open at once and has the ability to do things like insert version strings, dates, times, encrypt/de-crypt text and turn words from upper to lower case and vice versa without re-typing. The latter is very useful if you get documents where the author has gone overboard trying to make it look interesting BY USING ALL CAPITAL LETTERS LIKE THIS!

> Perhaps the most interesting section is the Tools menu which allows you to use the built-in calculator.



The Format menu offers a range of features for changing the way individual paragraphs look, although defaults can also be set in the Settings.

Perhaps the most interesting section is the Tools menu which allows you to use the built-in calculator. It also lets you run external programs, the internal Shell, and an external CLI.

The ARexx commands perform a number of tasks, like word counts or the removal of blank lines. *Blacks Editor* offers a very configurable environment. For example, by default you have to select to mark a block for cutting or copying, but you can choose to be able to select text simply by dragging the cursor across it. The preferences are all dealt with by the Setting menu, where you can set Auto-Save so that your files are automatically backed up at a specified interval.

You can change the requestor types, the default screen that the editor opens on, the fonts used, paragraph indents, formatting options, etc. In truth, what *Blacks Editor* delivers is not a high level word processor, but instead a tool that is very useful as an editor of documentation, readmes, etc.

You can quickly re-format documents, removing extraneous data or adding in dates for reference. It can turn the usual incoherent jottings into a well formatted document quickly and that is very laudable.

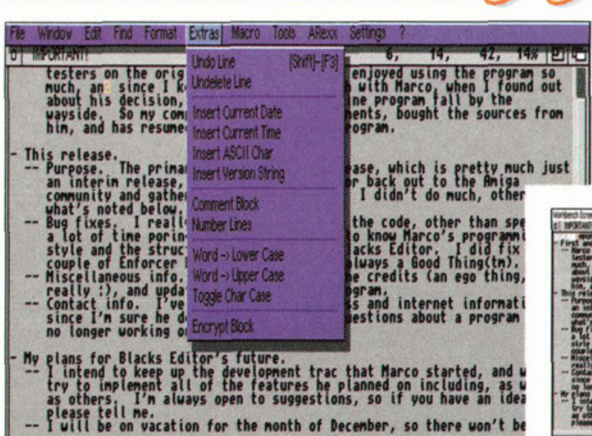
You can also make use of the macro recording function to automate routine tasks which makes it all even more impressive.

If you haven't updated your text editor recently, then the only real choice is between this and the other accomplished editor, *EdWord Pro*.

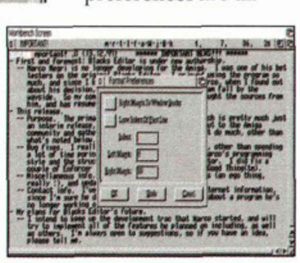
INSTALLATION

Only *Lzx* and *CLIMaster* can be installed to a floppy disk. The other two programs are only suitable for hard drive users and so can only be installed if you have a hard drive. *Lzx* and *CLIMaster* can also be installed directly to a hard drive.

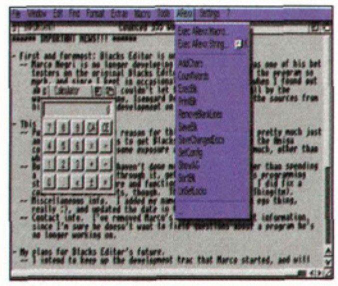
If you have a drive and want to install everything in one go, load Workbench and open the coverdisk. There is an install icon there for you.



The Extras menu can change cases, number lines and insert a variety of data, as well as recovering your last deletion.



Within the settings for *Blacks Editor* you can change the fonts and styles of requestors.

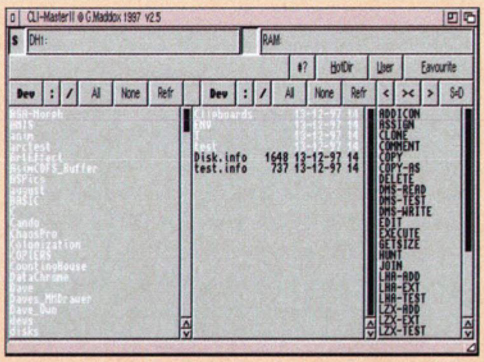


It includes tools like the calculator and has ARexx capabilities to perform word counts and the removal of blank lines from documents.

CLI MASTER

About six months ago we included version 2.1 of this small, but feature packed, file manager. The program is now in version 2.5 with many enhancements, so this new version has been included. The program can handle not only files, but also archiving and de-archiving, so it fits in perfectly with the registered version of *Lzx* which has been included on this month's Coverdisk.

If you can't get to grips with the CLI command, then this program is already configured to do the work for you. It's even small enough to be installed onto a floppy disk.



CLIMater has been updated and is the perfect accompaniment to *Lzx* for those who don't want to try to learn the CLI.

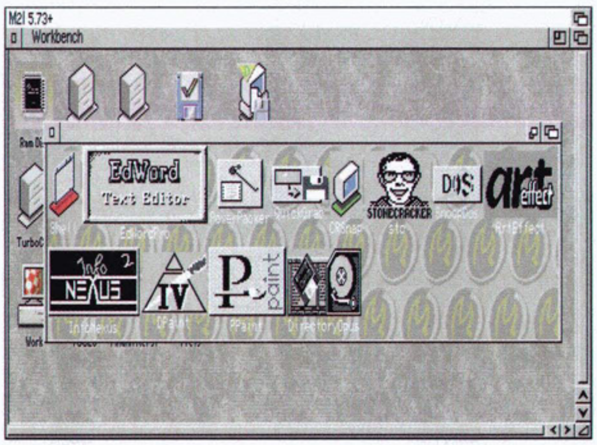
M2I

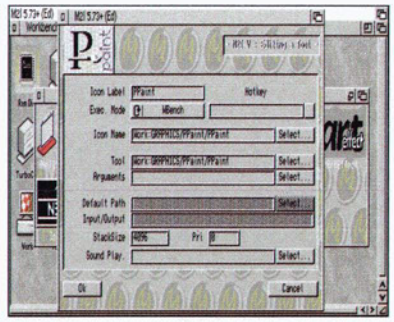
Keeping your Workbench tidy can be an almost impossible task. This is where *M2I* comes in. This utility is designed for hard drive users and opens up a window on Workbench. You can then drop in icons of programs that you use regularly so they are stored in this task handler, rather than on your Workbench.

If you place the file into your WBStartup drawer, the program will be launched every time you start up your Amiga. There are two modes to *M2I*. The first is Edition, for editing, where you can drop files on, and then select, the icon and choose edit from the menu where each program has information stored about it. You can change the icon that is displayed from the program's own icon and change the properties used to launch the program, so that it isn't launched from Workbench but through a Shell if necessary.

You can add a hotkey to launch the program and startup sound. The Stack size for the program can be changed as can any arguments to be fed to it. If you want to change the actual *M2I* preferences for the number of lines used for the programs, etc, select the Edit Icon menu item but without a program selected. To switch between this Edition mode and the user mode, press the Help key.

You can quickly set up your own project with your favourite programs in one window. This can be minimised at a click to free up space.





Each icon can be edited to change the preferences for the program. Autoscan is a new function used for including drawers in the interface.



There are many different ways that the interface can be displayed and the choice is yours, so you can work the way you want to.

M2I also includes a special AutoScan function which lets you have drawers included in the Window of the launcher so you can compartmentalise your tools. When you use this tool, you must use the Installer provided or you may find that the program cannot find the files it needs. If you do move the binary files from wherever you install it to, you must also move the Prefs folder.

Also, be aware that whenever you save any changes to the launcher (which you must do any time you add or edit any icons), you will also need to change the default tool in the project icon.

More details can be found in the documentation. Note that although this isn't crippled, it is still Shareware.

LZX - REGISTERED VERSION

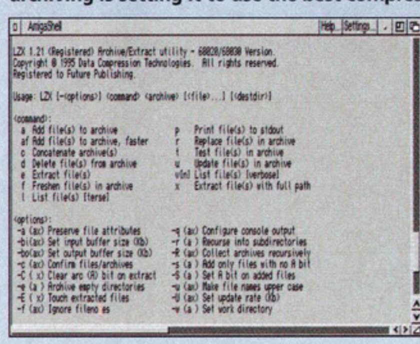
If you have ever wondered how on earth *AF* manages to fit all the data it does onto the two coverdisks, then here is your chance to find out. Most archives on the Amiga are *Lha* files, but there is a compression method that is superior.

***Lzx* was developed by Jonathan Forbes and has been used by *Amiga Format* for years because it can pack files down as small as possible. Like *Lha*, it consists of a CLI command that archives files (there is a different command compiled for different processor speeds) and a smaller *Unlzx* command to de-archive the files. The main *Lzx* command can also de-archive, but *Unlzx* is a smaller file. *Lzx* is better than *Lha* for a variety of reasons. Firstly, the algorithm developed to compress the archive is more efficient. Secondly, *Lzx* searches 64k ahead in order to find duplicate data, while *Lha* only searches 8k. This extended buffer means that there is much more likelihood that *Lzx* will find duplicates that it can compress and the more identical data it finds, the more it can compress the file.**

***Lzx* also does something that *Lha* cannot. It merges files, so rather than compressing one file and then the next, it actually gathers the data together from the read ahead, even if that means from multiple files, and packs them together. It makes intelligent choices too, such as packing text files together if it can, which is very efficient. This means that the archives, particularly if they include a lot of small, compressible files, can be anything up to 30% smaller than Lhas.**

In practice, a good average is about half that, so 10-15% better. There are more reasons for using *Lzx* though. It is faster than *Lha*, particularly at de-archiving. Since Jonathan stopped development, he has agreed to release the keyfile which allows you to use the registered features for non-commercial uses. The registered version includes a third compression level which, although slower, is even more efficient than the standard version. It can also de-archive *Lha* files faster than *Lha* itself can.

To use the command, you need to copy the lzx.keyfile to l:. Then copy the relevant version of *Lzx* to C: and rename the file Lzx. You can get a summary of the *Lzx* options by typing *Lzx* into a Shell. You will be given a synopsis of features, but these are the very basics (the -9 option on archiving is setting it to use the best compression method). To archive a file: Lzx -9 a destination:test.lzx source:testfile <return> To de-archive a file: Lzx x source:test.lzx destination: To view an archive's contents and compression: Lzx v source:test.lzx



The *Lzx* registered version offers two distinct advantages over the evaluation version, namely the additional compression method and the faster de-archiving of Lhas.

Games disk

AMIGA FORMAT





From a classic arcade clone to a preview of a forthcoming shooter, this month's joystick fest has David Taylor in a blasting frenzy.

Age of Rock

Imagine a sort of inverse *Tetris* with guns and you have *Age of Rock*. The game is playable by one to three players simultaneously. The aim is to stop the falling blocks from hitting the ground by completing the rectangle in the air. You control a spaceship that can fire blocks up. The shapes that fall down come in different sizes, and all you have to do is complete each shape into a rectangle. That shape will then disappear. Be careful though, because some of the shapes that fall are actually two shapes fitted together. In this case you must complete the first rectangle and then fill up the second shape.

"The first level is quite easy once you get used to the idea because you just have to fill in the shapes."

The first level is quite easy once you get used to the idea because you just have to fill in the shapes. On subsequent levels you will have to fill the shapes using the correct colour blocks. The complete grey shapes can be completed using any colour, but the ones that have colours in the grey will only accept the same colour. If you fire a different colour at them, it will be ignored.

To change the colour of the blocks you fire you press up and the colour of your ship will change to signify the colour you are now firing.

If you want to bring the blocks down faster, you can pull down and they will accelerate. This, of course, gives you less time to complete the rectangles. The game defaults to a single player using the keyboard.

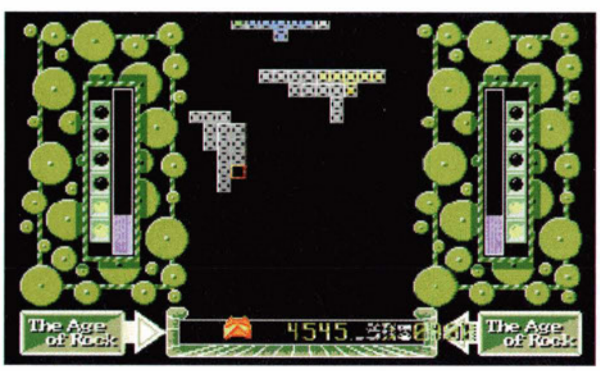
The keyboard keys are: *Left arrow – left, Right arrow – right, Up arrow – change block colour, Down arrow – accelerate blocks' descent, Right Shift – fire block.*

If you want to change to multiplayer mode, you can cycle through the game modes using the left and right keys. Three players will require two joysticks.

In multi-player mode there are two types of game. The first is Team play where you all play together on the same wide-screen to try and stop the blocks. The other is Challenge mode where the screen is split into two or three and the idea is to stop your own set of blocks and the first to miss loses the game.

If you want to play in single player mode using a joystick, you can change the options by pressing F8 at the title screen. The only other keys you need to know are P for pause during the game. Esc will quit the current game and, pressed again at the title screen, will quit the program.

You can turn the music off by pressing F2 and re-start it by pressing F1. This is the full game which has been released as Freeware by its author.



Age of Rock **block-shooting shock – you have to fill the grey shapes with the right coloured blocks.**

Full Game



Tetris **puzzles with guns in our full version of** ***Age of Rock!***

INSTALLATION

All of the games on this coverdisk have been packed so that they can be played directly from the booting coverdisk. Alternatively, you can play them from the coverdisk through Workbench. If you want to install a game to your hard drive to play from there, then you just need to drag the game's drawer from the coverdisk onto your hard drive so that all the files within the drawer are copied.

To play *GroundWars* from Workbench you need to first double click on the Assign Fonts icon to temporarily assign the fonts needed into the fonts path.



Multi-player shooty, puzzly-type action in our completely full game on this month's CD!

WBsteroids

If, like us, you remember the golden days of the coin-op, you'll be one of two types of people. One, the type who loves *Asteroids* and every incarnation of it that appears, or two, the type who was always crap at it and therefore loathes it.

This game is obviously for the former type. This Workbench version multitasks, but requires an A1200 or higher, because it gets quite complex.

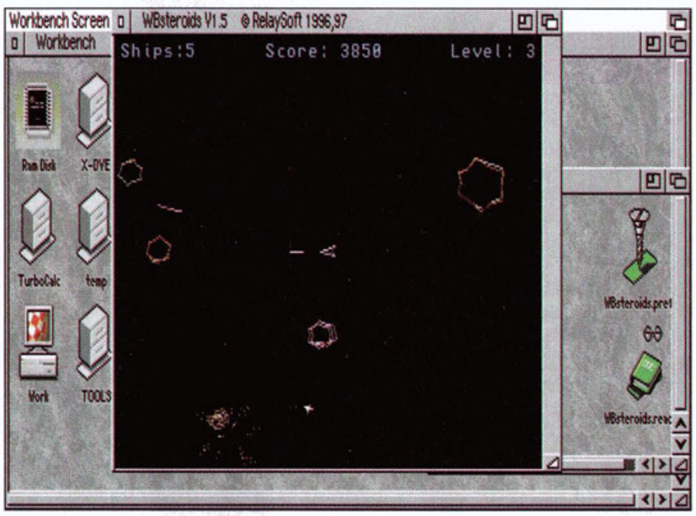
Essentially, the game is the same as the original. Your ship appears in the centre of the screen and you can rotate and fire. Each time you hit an asteroid it will split into two and the two will fly off in opposite directions. You need to then split each segment again until the small pieces are blown up. Of course, you can't just stay in one place because eventually an asteroid will hit you.

To move you can press forward, but remember that this will give your ship inertia and you won't stop as soon as you release the button. It takes time to get used to steering the ship, especially because the longer you hold down the forward button the more you accelerate. It's best to just use short bursts. If you need to slow down, turn to face the opposite direction and push forward. You can also use hyperspace to jump to another random point on the screen. This can get you out of tight spots, but is something of a double edged sword as it can also land you in trouble.

The game has plenty of extras added on since the original concept. Firstly, there are sets of bombs that appear on the screen. These only appear for a limited time and you have to fly over them to collect them. They will either fire out a 360 degree spread of bullets that will split any asteroid they hit or simply cause every asteroid left to split.

There are also extras like power-ups that will give you double shot. The double shot makes the game much easier, but you will lose it if you lose a life. However, if you complete a level, you will take it to the next one. By default the keys are: *Left arrow – turn left, Right arrow – turn right, Up arrow – forward (accelerate), Down arrow – hyperspace, Space – fire.*

If you want to change the keys, press the Help key at the title screen and you can define the keys. P pauses the game and Esc will quit the game, and pressed again will quit the program. This game is Shareware. Registration is 10DM (about £4) to the author, whose address is in the documentation. AF



Thankfully, in this version of *Asteroids* you can't be teleported under an asteroid, so it's much fairer. There are also extra features like power-ups.

GROUNDWARS PREVIEW

This is the first beta of a new shoot-em-up for AGA Amigas where the author is looking for feedback on what gamers think of the game so far. Although there are no bosses, you do get a feel for the game. When you play, you try to shoot down each of the waves of enemies, some of whom will take more hits than a single shot. There are weapon power-ups that you can collect. The waves of enemies will shoot at you, and if you lose a life your firepower will be decreased. In this preview you have infinite lives as the idea is for you to try out the game and see whether you think it is coming together properly.

The game is played using the joystick, although you need to press the left mouse button if you want to quit the program. From what we've seen, it looks like *GroundWars* could become a very slick and accomplished game, but the author needs to know what people think.

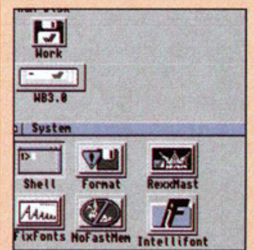
If you read the documentation, you'll see that the author isn't sure whether to continue to develop the game or not, so here is your chance to ensure the Amiga gets a new shoot-em-up. Send him your thoughts by emailing him at marjoh@algonet.se.



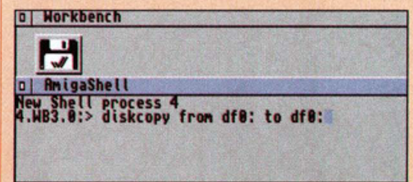
The promising beta version of *GroundWars*. Play it, then tell the author if you think the Amiga needs another top shoot-em-up.

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

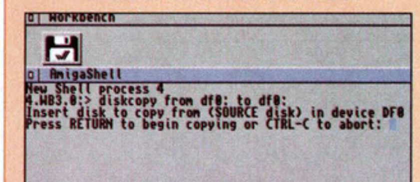


1 **Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.**

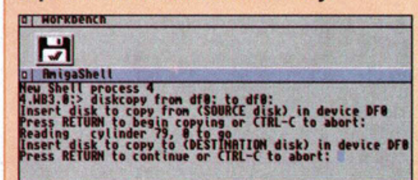


2 **Type in the following line (with a zero, not the letter O), taking care to put the spaces in the correct places:**

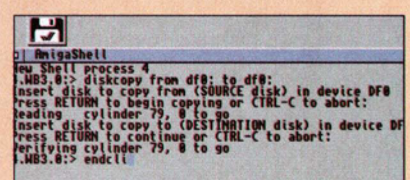
DISKCOPY FROM DF0: TO DF0:



3 **When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.**



4 **Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.**



5 **On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.**

DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, with 2x26p stamps and an SAE to:

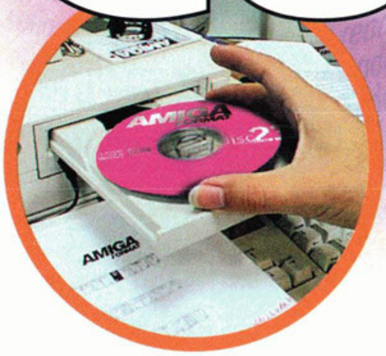
***Amiga Format* (insert name of disk)**
TIB PLC • TIB House
11 Edward Street
Bradford • BD4 7BH

If there is a manufacturing error then the stamps will be returned with a replacement disk.

Coverdisk

AMIGA FORMAT





Welcome to ***AFCD23***. If you're new around here, you wanna ask the boss about what's on the CD. He'll tell ya. What? You don't know who the CD boss is? Why, it's that there Ben Vost...

So, twenty three under our belts and lots more to come, eh? Actually, I'm not too impressed at the amount of stuff we got from you lot this month. Less than 10Mb? It's the lowest yet. Now stop sulking and get on with it and send some more stuff in. It doesn't matter too much, however, since we have loads of other really great things for you anyway this month.

Cologne Devcon report

AFCD23:-In_the_Mag-/Cologne

Okay, you asked for it. I got emails and telephone calls galore asking what went on in the DevCon, and people didn't seem to really believe me when I said that not a lot happened. So you asked for it. It's a shame we didn't manage to get this on our last CD to go with all the pretty pictures, but you have all 76 minutes of Petro, Jeff et al. talking to us, and answering questions from the audience. The quality's a bit ropey because I didn't imagine people would want to listen to all this – it was only going to be for my notes – but the mpeg audio stream should play on pretty much anyone's Amiga. If you have trouble with it or it sounds very staccato, then try examining the iconx script that runs the whole thing and experiment with some of the other players we've provided.



Hear exactly what Petro had to say about the Amiga at DevCon.



HD INSTALLERS

AFCD23:-ScreenPlay-/Utilities/HD_Installers

Got a game that's lingering in your disk drawer because you can never be bothered to reboot your machine and wait for the floppy to load? Those old games can be a right pain, especially since they won't install to hard drive.

The solution is right here on *AFCD23* with over 200 hard drive installers for your games.

In fact, there's so many that we've had to separate them into two different drawers, together with a third drawer for all the installers from JST. To give you some idea of the sheer number of different installers we have on this CD I'll give you just a few of the names: *Desert Strike, Lotus 3, Silkworm, Xenon2, Rick Dangerous, Space Crusade, Skeleton Krew, Road Rash, Space Hulk, Speedball 2* and many, many more.

Not only do these bits of software allow you to install these games to your hard drive, many also give you the ability to alter things like the number of lives the player has and how many credits or cash is available.

READER WARRANT

When you're sending in your submissions make sure you give us an address where you can be contacted.

The address to send your stuff to is:
CD Submissions • *Amiga Format*
30 Monmouth St. • Bath • BA1 2BW

Everything included on the *AFCD* must have a reader warrant with it. Just cut it out off this page, sign it and send it in to us with your submission. A final reminder: if you don't include this warrant we simply won't be able to put your stuff on the CD – and that means you won't be able to have it used by other readers.

In respect of all material which forms my CD Submission to Future Publishing's *Amiga Format*, I hereby warrant that:-

1. The material is original and does not infringe any other material or rights;
2. The material does not contain any material which is defamatory, obscene or indecent and is exempt from classification under the Video Recordings Act 1984;
3. That there are no legal claims against the material provided;
4. That I have full power and authority to provide this material to Future Publishing.

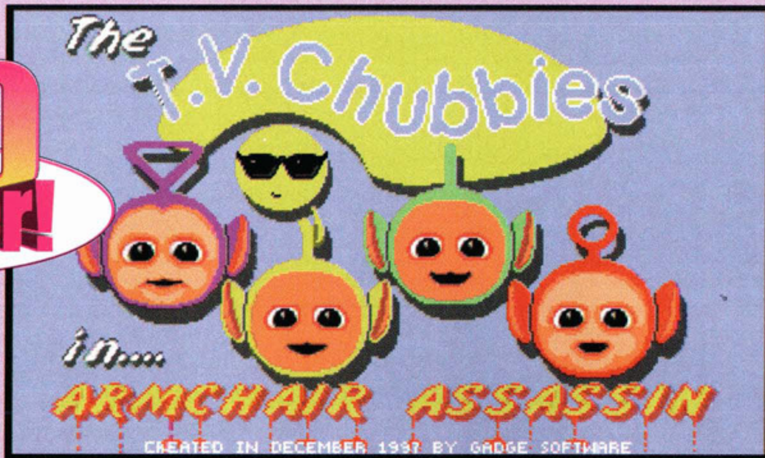
Signature: ________________________________

ReaderStuff

Not a huge selection this month, but what we did get was pretty good. The backlash against TV's latest stars has begun in earnest with Simon Hitchen's *Armchair Assassin* game in which you get to shoot "TV Chubbies", four different small creatures with TV aerials on their heads and tellies in their stomachs. You even get the choice of a shotgun, a mini-gun or... a photon torpedo launcher?!

This fun little game has meant that Simon has done something that no other *Amiga Format* reader has ever done and won two prizes in the space of three issues! Well done Simon, your fifty quid will be on its way to you soon.

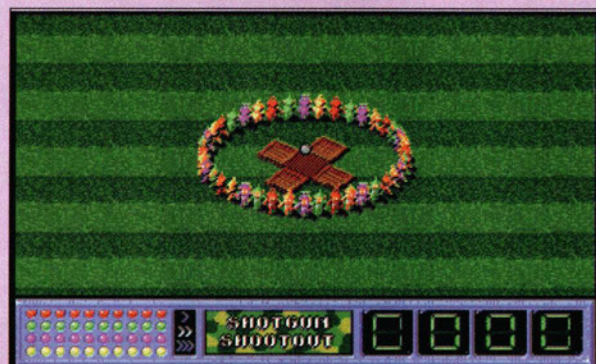
£50 AF Winner!



On a different note, ex-army man John Dixon has a helpful suggestion. He's offering to help translate German documentation into English and he'll do it the other way round too. Viel Glück, John!

Out of the rest of the stuff we received from our readers, we mainly had new versions of things we'd previously published. There's a new version of the award-winning *GUI4CLI* from Dimitris Keletsekis and Neil Crawforth's *MagicTV* program, but David Vivash's two games are quite fun (why not submit them to Reader Games too, David?) and Paul Naylor's *XTR* tracks will, I'm sure, be popular.





Great stress relief with *Armchair Assassin*. Shoot! Kill! Destroy! Ahem. Sorry.

GAME PATCHES

AFCD23:-ScreenPlay-/Utilities/AmigaPatchList2.9Aminet

Not only have we given you a whole bunch of installers this month, but you can also learn how to remove the copy protection on old games with this handy AmigaGuide document. *Amiga Format*, Future Publishing and the author of the guide, Mark Knibbs, do not condone software piracy, but this guide should come in very handy for all those old games for which you've lost the colour wheel or manual.

Most of the games are very old, including Infocom titles (I'm not sure why you'd need to de-protect those, I thought they weren't copy protected anyway) and others of a similar age.

READER REQUESTS

This month we have been asked for the current Aminet index again, which we downloaded as late as possible in our schedule so it is as up-to-date as is humanly possible. We also had requests for the *Multi-user File System* and the very latest revision of *Apache*. We struck lucky with this one as the 1.3b3 release came out the day before the CD was due, meaning that it's as up-to-date as possible too. Other requests included a repeat run of the *Alien Breed 3D2* source code and a voice activated Shell.

Remember, if you want a program to go on our CD, just ask. Details can be found in the AFDocs file in the Reader Requests directory.

Want to get into raytracing but can't afford the best commercial packages? We have the perfect solution right here...

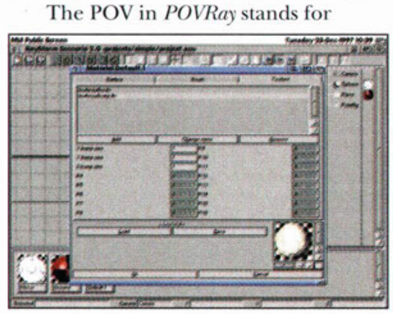


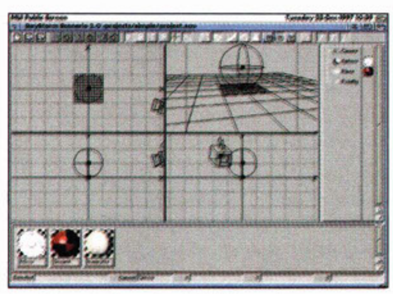
POVRAY3 & RAYSTORM

AFCD23:-Seriously_Amiga-/Shareware/Graphics/Raystorm
AFCD23:-Seriously_Amiga-/Shareware/Graphics/POVRay3

If you fancy getting into raytracing but you can't afford one of the big boys like *Cinema*, *Imagine* or *Lightwave*, why not try out *RayStorm* or the venerable *POVRay*?

The POV in *POVRay* stands for





***RayStorm* (above) and *POVRay*, the alternatives to the more expensive titles which are available.**

Continued ➡

At your fingertips

NEW SUPERVIEW

AFCD23:-Seriously_Amiga-/Shareware/Graphics/SViewNG

It's time for another version of Andreas Kleinert's labour-of-love, *Superview.* The new version has added support for all manner of Amiga icons, the newly proposed IFF-RGFX standard and fixes several bugs from previous releases. Herr Kleinert offers PowerUp support for various file formats that require it and is always busy adding to the 48 different graphic file formats, 32 operators and 22 display devices.

Superview is a great piece of software which we highly recommend. If you haven't tried it before, perhaps it's time you added it to your machine.

NEW WEBSITES

AFCD23:+Look_here_1st!+/AF_on_the_web

A bit of a double whammy this month. In addition to our usual eclectic mix of Amiga websites (if you want others, just let us know), we have both the Village Tronic site and Tobias Abt's pages. Tobias is one half of the team that produces Picasso96 and these pages should tell you everything you need to know about both the Picasso96 and the Picasso graphics cards.

SCION

AFCD23:-Seriously_Amiga-/Shareware/Misc/Scion506

Following our having put an older version of *Scion* on our CD as a reader request, it seems like the author chose an appropriate time to release a new version of his genealogical database to a waiting public. This is quite a major update with a full reworking of the user interface and the addition of many new features, so it's definitely worth your while taking a fresh look.

FRAME GRABBER PROJECT

AFCD23:-Seriously_Amiga-/Shareware/Hardware/FGrab

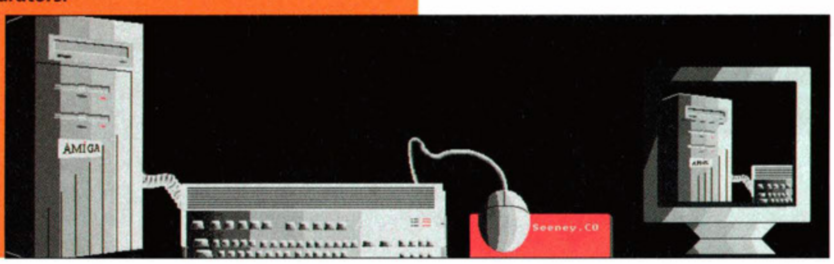
Although other mags may have given you the tools to make your own infrared thingie, how about being able to digitise full overscan TV signals in 24-bit?

This project comes with all the schematics you may need, in German and English, and a variety of formats including text, ILBM, postscript and dvi to ensure that you'll be able to follow all of the instructions to make your own frame grabber which will plug into your parallel port.

COOKIE MONSTER!

AFCD23:-Seriously_Amiga-/Shareware/Comms/Other/fortunes

98,506. That's how many fortune cookies are included in this file. From quotes by William Shakespeare to humourous definitions of acronyms, this cookie file has it all and should be completely compatible with any tag-line picker that uses "%" signs as separators.



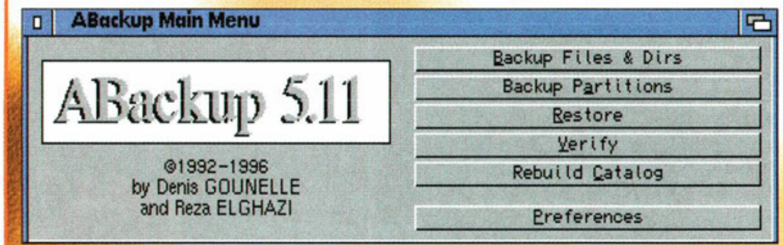
Worms levels to beat your mates up in, courtesy of our readers (see the ReaderStuff drawer).

SPOTLIGHT ON A HANDY TOOL!

AFCD23:+Look_here_1st!+/Handy_Tools/ABackup514

Denis Gounelle's *ABackup* has been a bit of a lifesaver in a market that no longer has a commercial backup program still in development. The best thing about it is the fact that we can give it to you on our CD-ROM every month so you can use it if you need to send us big multi-disk submissions.

ABackup is very easy to use and works with floppies and other media for making backups, so it's flexible, solid and Shareware! Make sure you install it the next time you want to send us any files bigger than a floppy.



This rather nifty backup program is on our CD every month, so use it to send us any of your files that are bigger than a floppy.

Persistence of Vision and persistence is what you'll need to get to grips with this CLI-based modeller and renderer, but the results can be outstanding. Fortunately, you are provided with a large number of example scenes and objects which you can pick your way through, and because *POVRay* is available on many platforms, there's a wealth of additional information available on the net.

RayStorm is a little different. It's a dedicated Amiga raytracing program that has a MUI interface and a lot of features that other commercial offerings should take note of. Give 'em both a go. We'd love to see what you can do with them on our Gallery pages...

PLOTTER3D

AFCD23:-Seriously_Amiga-/Shareware/Graphics/Plotter3D

More 3D magic, this time a three dimensional function plotter. Again, this is MUI-based and provides some serious functions. You can use it for all your hyperboloid needs and *Plotter3D* will even render them for you with heightsteps or XYZ colourspace rendering. Although the average Joe might not get much out of this other than pretty pictures, serious users should find it is very handy indeed.

NEW MAGICMENU

AFCD23:-Seriously_Amiga-/Shareware/Workbench/MagicMenu

If you're still using the old Martin Korndorfer *Magic Menu* then you may not be convinced of its stability or usability with programs like *Photogenics* or *Final Writer.* The one we have on our CD in this drawer, however, is much updated from the 1993 original and has a whole new team working on it.

Even better, should you suspect that your favourite program still isn't going to like it, you don't need to uninstall *Magic Menu* – just hit the Alt key and voila, you'll be straight back to the plain old *Intuition* menus.

MUI BLITZ LIBS

AFCD23:-Seriously_Amiga-/Shareware/Programming/MUI/EFMUILib

Always wanted to code MUI programs, but didn't want to have to learn C or E?

If you speak Blitz's dialect of BASIC, you can now code your MUI apps very easily (according to the authors) using the EFMUI.lib for Blitz Basic.

There now, that should make things a bit easier for you.

DISCLAIMER

DISC NOT WORKING?

If your *AFCD* is defective, please return it to the address below. Please make sure that you have followed our installation procedures correctly to ensure that there is no physical problem. Please send us the *AFCD* along with a description of the fault (not forgetting your name and address). A new working version should be returned to you within 28 days. The return address for faulty discs is:

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("Coverdisc" in the subject line).

Please note that the helpline staff provide assistance with technical problems directly related to the CD and cannot provide training on the software or hardware in general.

Next Month

Myst

The long wait is over. Next month we will bring you a review of the game everyone has been waiting for!

PLUS:

But that's not all. We will also be bringing you reviews of *TurboPrint 6*, a variety of modems, the new NetConnect bundle, a new tutorial series and a feature on how to use your Amiga to program PIC chips! Plus: reviews of all the other games, hardware and software released, and all of your regular favourites.

March Issue on sale Friday, 20th February.

The contents of future issues are subject to change, acts of God(s), editorial whims, Ben and other disasters, both natural and unnatural – no guarantee is implied or intended.

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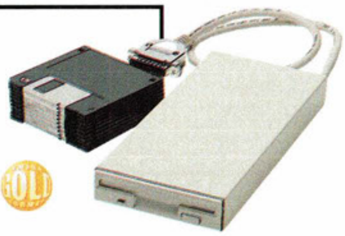
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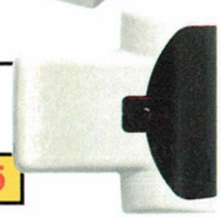
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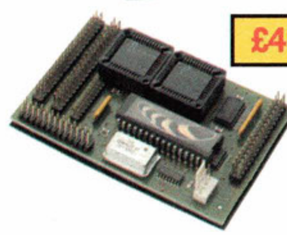
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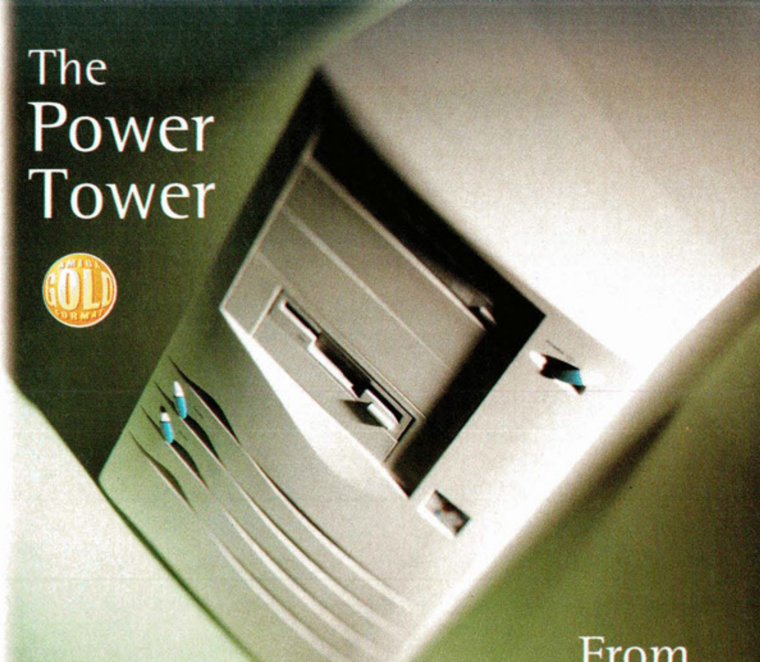
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- Wordworth 4.5SE
- Turbocalc 3.5 Spreadsheet
- Datastore 1.1 Database
- Photogenic 1.2se
- Personal Paint 6.4 & Organiser 1.1
- Pinball Mainia game & Wizz game

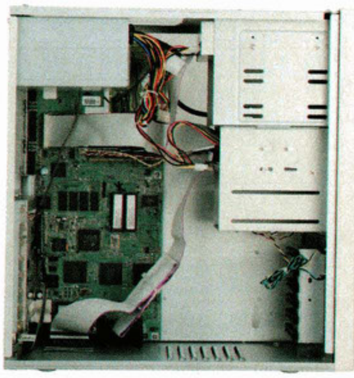
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- A1200 Main board
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- PCMCIA V Adaptor - allows squirrel to be fitted internally £29.95
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- SCSI-II Micro high density connector. Internal 50 way pin header, external micro HD connector £25.95
- SCSI-III Ultra Wide internal connector, external micro HD connector £29.95
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- 3 Way IDE ribbon cable (suitable for HD's, CD-ROM) £9.95
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- Iomega ZIP drive - Internal inc. cable IDEFix software, Power Zip Tools, 100MB Cartridge and IDE 4 way buffered interface £149.95
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- PC Keyboard Interface £29.95



AMIGA 1200 MAGIC PACK

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- AGA CHIPSET
- WORDWORTH 4.5SE (WORDPROCESSOR)
- TURBOCALC 3.5 (SPREADSHEET)
- DATASTORE 1.1 (DATABASE)
- PHOTOGENIC 1.2SE/PERSONAL PAINT 6.4
- ORGANISER 1.1 (PERSONAL ORGANISER)
- PINBALL MAINIA (GAME)



AMIGA BUNDLE ONE

AMIGA BUNDLE ONE INCLUDES:

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- TURBO 68030 LC ACCELERATOR
- 4MB RAM INCLUDED

AMIGA



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- 68040 25MHZ PROCESSOR

A4000 TOWER £1099

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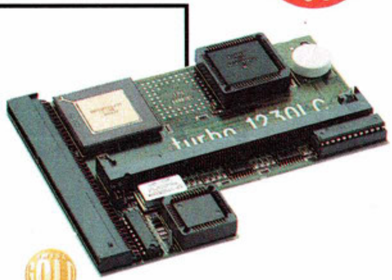
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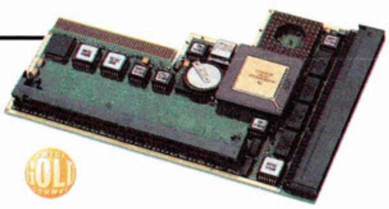
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- PCMCIA Friendly, Inc. Clock. Optional FPU

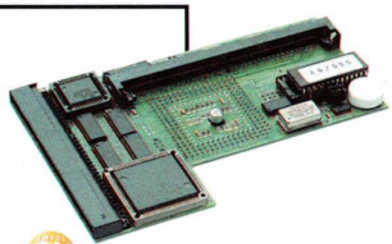
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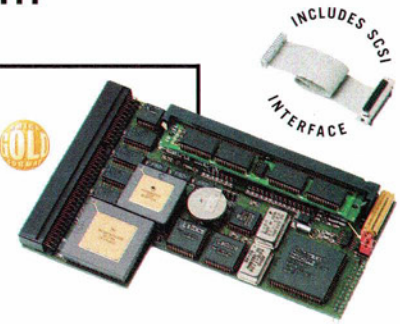
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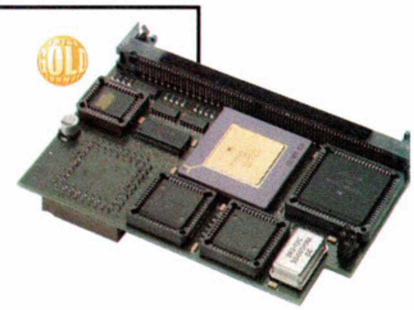


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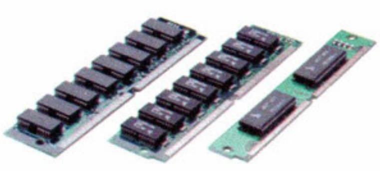
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